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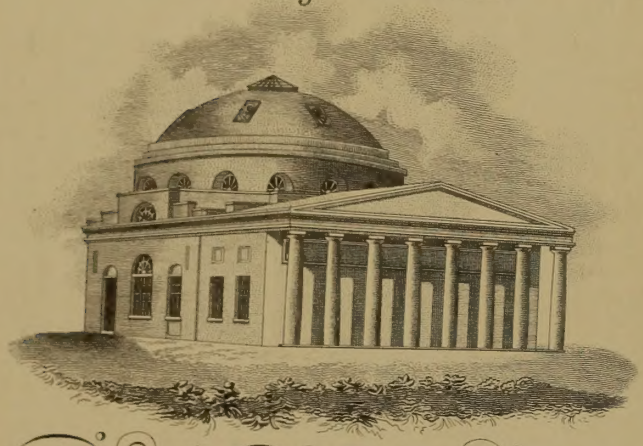

University of Maryland

University of Maryland Theses

Daily Theses of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1837. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained many errors in authors' names, titles, and/or pages. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were: Richard J. Dalton, Principal Librarian/Preservation Officer, Maria Milagros Pinkus, Metadata Management Librarian, Angela Cadmore and Carol Harling-Henry, Technical Services Division, Sarah Hawks, Alex Schaaf and Megan West, Services Division.

These dissertations were digitized in 2016-2017 and are available at the UM Digital Archive (hdl.handle.net/1903/18811) and the Internet Archive (www.archive.org).

University of Maryland Theses

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(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1858 (b)

Author	Title
Boone, James H.	Opium and Its Therapeutical Uses
Henderson, Charles Z.	Reports of Cases Occurring in the Baltimore Infirmary
Brooke, Ballard S.	Menstruation and One of Its Important Disorders, viz, Amenorrhoea
McComas, Josiah Lee	Fractures
Hopkins, William Worthington	Dyspepsia
Lee, Charles Carroll	Natural Labour
Weems, Henry Y.	Causes of Disease
Adolphus, Philip	Clinical Cases of Dropsy
McKee, Charles Edwin S.	Therapeutics of Quinine
Cooke, James Philip	Erysipelas
Crampton, Joseph K.	Fractures of the Femur
Williard, John Thomas	Decarbonization or Oxygenation of the Blood
Favorite, John	Inflammation
Lacy, John Bacon	Hemorrhage
Lowe, James Alfred	Phenomena and Conduct of the Lying-In Room
Dare, George H.	Abortion
Hunter, William A.	Scarlet Fever

HSHSL 2011 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1858

Boone, James H.	Opium & Its Therapeutical Uses	42p.
Henderson, C. Z. (Charles)	Reports of Cases Occuring in the Baltimore Infirmary	29p.
Brooke, Ballard S.	Menstruation and one of its important Disorders, viz. Amenorrhea	35p.
McComas, J. Lee (Josiah)	Fractures	30p.
Hopkins, Wm. Worthington (William)	Dyspepsia	26p.
Lee, Charles Carroll	Natural Labour	26p.
Weems, H. Y. (Henry)	Causes of Disease	25p.
Adolphus, Philip	Clinical Cases of Dropsy	26p.
McKee, Charles Edwin S.	Therapeutics of Quinine	27p.
Cooke, James Philip	Erysipelas	15p.
Crampton, Joseph K.	Fractures of the Femur	38p.
Williard, John Thomas	Decarbonization or Oxygenation of the Blood	26p.
Favorite, John	Inflammation	22p.
Lacy, John Bacon	Hemorrhage	21p.
Lowe, James Alfred	Phenomena & Conduct of the Lying-in Room	23p.
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Hunter, ~~Wm.~~ A. (William)	Scarlet Fever	22p.

UNIVERSITY OF MARYLAND
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Founded 1813
SCHOOL OF MEDICINE

An inaugural dissertation
on
Opium, and its
Therapeutical uses;
submitted to the
examination of the
Provost, Regents,
and
Faculty of Physic,
of the
University of
Maryland, for the
degree of Dr. of Medicine
by
James H. Boone, of
Maryland, 14th February 1858.

[illegible] comply with that requirement of your School, which is, that every student becoming a candidate for the degree of M.D. of Medicine shall deposit with the Dean thereof a written dissertation on some subject, of some branch of Medical Science.

Acting as many others have done, who have sustained the same relation to your school which I now do, I have gladly availed myself of the interval for [illegible] six months to find a suitable subject whereon to write.

Having thus [illegible] I have severally consulted my [illegible] friends as to the propriety of [illegible] in your school.

In Physiology I traced [illegible] and various formations of Blood, and the fitness of the Chyme of his feeble existence. I noted the beautiful process of mastication, and digestion, and traced its action even until the thoracic duct had emptied the nutrient particles of chyme into the venous circulation, to be used in the support of the body, until the [illegible] particles were being [illegible] as Blood. I noted the beautiful [illegible] of the circulation, and noted the difference between that of the Foetus and the Adult. The Cerebral organs, I found were [illegible] in organization, as they were vital in importance, and I resolved to avail myself of the benefits to be derived from the

ardent labours of the writing Hand on the Physiology of the Human System.

Anatomy exhibited the beautiful adaptation of parts, while the muscles in their normal condition typically antagonised each other, as the biceps flexor, and the biceps extensor, each of which they and will connected by the accompanying motor nerves.

When these heads of ours, which I am ready to think deem contain the vistas of the Hippocrates, I found difficulty, have on a tooth-like prominence, the tela; which if by some might this up should become displaced, so near the cerebro-spinal axis, would almost instantly produce death.

The heart, I found enclosed in a serous sac the pericardium which was subject to fatal inflammation.

I would have written upon the Pathology of Tuberculosis, that disease which invades almost every fine site, and triumphs in almost every clime, but I found that our most reliable authority were divided in opinion, as to its true origin, though all agreed as to its finally fatal termination.

Surgery offered many subjects of interest and instruction, but I found the faculty so much occupied with the discussions on, and defining the difference between Caries and Necrosis, and painting about four inches below

a poupart's ligament at the proper place for the ligature to the femoral artery, taking the inner side of the sartorius muscle as a guide.

Others had given the different varieties of direct, indirect inguinal, and femoral hernia, and each part had given a more successful mode of its reduction. Others I observed had diagnosed a dislocation of the humerus downward in the axilla, and of the femur upward, and backward upon the dorsum of the ilium, and had given proper directions for its reduction.

Having used Ward and Watson on Theory and Practice, I found that

the premonitory symptoms of the exanthemata were very nearly allied to each other, and that depletion both local, and general, were required in acute inflammations, and that in hysteritis we have a positive indication for the use of opium.

Cohabitrics affords ample scope for the exercise of the mind, though other half the medical students are very inclined to argue that knowledge of the contagious, or non-contagious character of a puerperal fever, that you should be able to feel the shoulders are before you can safely apply the forceps, and that cold affusions to the surface are the ultima ratio, is the chief question

in utterne harmonyes.

In Chemistry, I could not make a Bi-chloride of Hydrogen without 2 eq. of chlorine to 1 eq. of Hydrogen, and of Potassium. I found that if I made a decoction of a substance, the medicinal properties of which depended upon its volatile oil; that I should defeat my object by driving off that oil.

In a Toxicological and Medico-legal point, the Mineral acids, and Gummi Opii will produce death, post mortem exhibiting in the former general inflammation, & corrosion of the gastric mucous membrane and in the latter cerebral venous congestion, sometimes accompanied

with effusions. — Their antidotes are found to be the relaxing [illegible] on the one hand, and powerful stimulation, internally and externally, on the other. After several partial reviews of Materia Medica and Therapeutics I resolved to avail myself of the [illegible] and no hesitating between Opium and its therapeutical uses and, endeavour to write thereon.

Opium then is the concrete juice of the Papaver somniferum, which is one of the most ancient known and described plants.
It was spoken of by Homer, and employed in Medicine by Hippocrates, the

having recommended the juice in a case of uterine disease.

The following corresponds to the specific character of the poppy.

The capsules are obovate, reflexed as alike as the calyces, smooth,

The stem is smooth and glaucous.

The leaves are lanceolate, cut-pinnatifid dentate, and somewhat obtuse.

It is an annual herb, with a white tapering root, stem from 2 to 6 feet high, erect, branched, leafy, glaucous, bearing flowers, usually white or of different tints, though sometimes white.

The leaves are alternate, sessile, ovate, oblong, glaucous beneath,

The peduncles are terminal, leafless,

with black seeds, [illegible] [illegible] Stamens.
roundish, or semiform, oil, sweet, and
edible.
It inhabits Asia and Egypt and
grows apparently wild in some parts of
England. It is culti-
vated in Hindostan, Persia, Asia Minor,
and Egypt on account of Opium.
The word opium is derived from
Opos, the juice, and signifies that
the juice par excellence.
The mode of obtaining opium from the
poppy capsules in Asia Minor is as
follows, - the difference in which it differs
elsewhere. A few
days after the flower has fallen, the cap-
sules are cut horizontally, taking care

that incisions do not penetrate the internal cavity of the shell.
A white substance flows out, and collects in tears on the edges of the cuts. In this state the fruit is left for twenty four hours, and the opium is collected by means of large blunt knives, or of leaf furnishing the extent of a grain or more, and that only once.
It is afterward beat up with lime in small earthen vessels, enveloped in dry leaves and brought into market.
There are several varieties of opium, the principal of which is that made from Smyrna. This annit contains about 8 per cent of Morphia.

The constituents of opium are Narcotina, Codeia, Narceia, Narcein, Thebaina, or paramorphia, Pseudomorphia, Meconic acid, Lactic acid extractive, Sulphuric acid, resin, fat oil, gummy matter, Caoutchouc, albumen, odorous principle, and lignin.
The most important of the principles or constituents is Morphia, taken alone, which will be spoken of in turn.
Of the operation of opium on the human system, there are three degrees. - The first is produced by small doses as from [illegible], which produces a [illegible]-

lant effect, with a sensation of fullness about the head, which is accompanied by a degree of [illegible] of the nervous functions.
The mind is exhilarated, the ideas flow more quickly, while there is a capability of more great exertion.
This is followed by a diminution of muscular power, and of sensibility to the impression of external objects.
A desire of repose is experienced, with a tendency to sleep. The mouth and throat become dry, hunger diminished, thirst is increased, followed by slight constipation.
Given in full medicinal doses, from gr. ¼ to iv the stage of excitement

is very soon followed by a state of stupor.
The fulness and fullness of the pulse
is quickly diminished, and becomes
even below the natural standard.
In the third stage of poisoning, or the
poisonous effects of opium, in the
language of Dr. Christison, and
from my own pure, I will add, is not
"the stupor rapidly increasing, the
patient becomes insensible, not
able to utter an expression; breathe
very slowly, his pulse still, with closed
eyes, and contracted pupils; while the
countenance indicates perfect repose.
As the poisoning advances, the pul-
tures become ghastly, pulse feeble,
muscles relaxed, and subsequently

is speedily procured, death ensues.
For its narcotizing influence in the sick,
and disease, opium has been used
in quantities, which would at once
seem incredible to the casual observer.
Beginning with doses of from [illegible]
grs ij, the dose in a short time was
to be doubled, increased, to obtain the
the desired effect, until been in not
many cases ℥ij of the solid opium have
been taken with impunity, in the space
of the twenty four hours.
In a case of cancer uteri, [illegible] an
account of lady having taken ℥ij
of the pure Dr. besides a [illegible] in the
quantity of the solid opium in the
course of twenty four hours.

As to the injurious, or [illegible] injurious effects of opium on the bodily system, there seems to be still a diversity of opinion — some telling us that the opium eater may be known by an attenuated form, jaundiced [illegible] pale, dull spirits, sunken eyes, impaired digestion, [illegible] and physical imbecility, [illegible] others say to cite only the 3rd [illegible] of the confirmed opium [illegible] plunged in the last stage of [illegible] and physical exhaustion, [illegible] as distinct from rational [illegible] as to point the horrors of delirium tremens, and upon the evidence thus at once to convince the [illegible]

use of alcoholic liquors.

Corrigan (says my authority) [illegible] madman, the subject of delirium tremens, with the prostrate debauchee [illegible] of opium, the wild drunkard, with the dreaming sensualist intoxicated with opium — the latter is at best harmless to all save his unfortunate self, whilst the former is but to be [illegible] a dangerous nuisance, and an open bad example to the community at large. At least, in the Chinaman, Sepoy, the open evidence of those injurious effects in working for this race of people are muscular well formed, and the latter being frontier [illegible] of [illegible] experience in the unhealthy climate, and

under a fierce sun, while their dispositions are cheerful and peaceful.

I would here suggest that the difference of appearance between the European and the Chinese opium eater, may be that as a general rule the former may have taken it for some chronic malady which may have already prostrated the powers of life, and while the use of opium is so affecting the nerves of sensation that the patient is insensible to the pain, still the primary organic disease is silently making progress towards upon his already enfeebled constitution.

Others in the Chinese who commence it in early life, rather as a luxury.

than a necessity, we find no such morbid train of symptoms following as a result of its unnecessary use. And why indeed may not the system — the secreting mucous membrane for example, become insensible to its slightly astringing effects, as does the brain to its narcotizing influence until that effect ceases to be an injurious one. The general therapeutic effects of opium upon the system is a subject which requires close attention. In noticing its effects upon individual organs, or the functions of organs, we find that upon the cerebro-spinal system, in moderate doses it first produces excitement of the vascular system

of the brain, and also of the cerebro-spinal functions.

Stupor is the result of poisonous doses, which is succeeded by coma, from which the patient cannot be aroused.

Its effects upon the digestive system are such as tend to check secretion from the whole canal, and sometimes has been known to entirely suspend digestion for the time, also causing slight constipation.

The vascular system is not uniformly affected by opium, as if it we sometimes see the fulness, and frequency of the pulse increased, flow of urine diminished.

The mechanical part of the

Respiratory Function seems to be affected by opium; and that in two ways, viz; it powerfully influencing the contractility of the muscular fibre, and thereby modifying the respiratory movement; the primary effect of which is a slight increase in frequency.

It is supposed to effect the arterialization of the blood by diminishing the supply of nervous energy by which the oxygenation of the blood is effected.

It diminishes the sensibility of the lining membrane of the bronchi, bronchial tubes, and cells, and diminishes secretion therefrom.

The indecision respecting opium's influence over the genito urinary

organs of bachelors would remain, though in some cases it diminishes the urinary excretion, at the same time making that fluid turbid, and thick is a proven fact.

Dissection however reveals that the diminished excretion is not the result of diminished secretion by the kidneys but is referable to the physiological condition of the vessel coats. Children under these circumstances being found fully distended with urine.

Such was supposed to have been the effect of this drug on the Sequel of an that we are told, some of the Eastern nations had recourse to it as an aphrodisiac.

Again we find

impotency ascribed to the too frequent use of opium, which would lead us to conclude that its influence on the venereal appetite is not sufficiently satisfactory to warrant its practical application.

We do read of an altered condition of the catamenial, and lochial discharges of women, (and also of the secretion of their milk) being brought about by its use. Furthermore that at times it has seemed to affect the testes in Men, and to narcotize the prostate of the Mammary secretion.

The Cutaneous system is affected by opium in an analogous way to the organs of sense, - that of touch and

Sensibility is but the operation [illegible]
of the skin seems rather to be in-
creased, appearing in medicinal doses
a powerful Sudorific.
Its topical effects combined with its
general, seem to be slight indeed.
Of the post mortem appearances after
its use, the most important are those
observed in the nervous system. Such as
turgescence of the vessels, effusion of [illegible],
or coagulable lymph, and occasionally,
extravasation of sanguineous fluids.
With the modus operandi of opium
we are but slightly acquainted, though we
must suppose that its action is
recognizable in the secretions and
exhalations, and besides bringing down

narcotized by sucking nurses who have used the opii; that its odourous and active principals must be absorbed. It also acts on the nervous system as an alterative; - that is it produces an increase, a diminution, or an alteration of activity therein.
This subject however present a wide field for speculation, and I am not adequate to the task.
Of the therapeutical uses of opium it is undoubtedly the most important agent of the whole Materia Medica. For other medicines (say 1 or 2 excepted) we have one or more substitutes; but for opium none, at least in the great majority of cases - at least, I have

and beneficial influence is required.
Its effects are immediate, direct, and
obvious. Such
is the importance of this drug in the
estimation of some writers, that they
conclude the science of Medicine has
lost half its beauties without it.
Exhibited then, under certain regula-
tions, to mitigate pain, allay fever,
promote sleep, relieve [illegible] suffering,
produce rhoeshination [illegible] to
[illegible] of
[illegible] it at
[illegible] an invaluable [illegible],
Spasmodic, Sudorific, [illegible]
Sedative, and astringent.
A Medicine then whose intrinsic value is
acknowledged by the world, there seems

scarce a disease to which them is
heir, in which at some time, and
under some circumstances it may not with advan-
antage be used.
The consideration of opium in fever
seems to offer greater difficulties to
the enquiring mind, than that of
any other disease. - The propriety of
its, for its use, being watchfulness,
ness, delirium, tremor and disorder.
Opium I believe is generally thought
to be valuable in intermittents of a malignant
type.
Though on the authority of the Lord
several patients have died under its administration
in the hot stage, with strong
convulsions, and delirium, yet the

Same authority accounts for the relief by it, of vomiting, [illegible] in which it was administered immediately succeeding the last stage.
It becomes useful in many other types of fever, though our present space will not allow a detail of them.
The use of opium in inflammatory diseases has long been regarded as objectionable, though it has been frequently resorted to either as a palliative, or as an auxiliary to antiphlogistic treatment.
It seems however much better adapted to the treatment of membranous inflammations, than those of the parenchymatous structures of organs

Opium then may be used advantageously in inflammatory conditions of both mucous, and serous membranes. It has been long used and highly lauded in gastritis, enteritis, peritonitis, cystitis, dysentery, diarrhœa, rheumatism, delirium tremens, diabetes, and to guard against the sensations consequent upon the performance of large surgical operations.

In the treatment of the purulent peritonitis of women, the great value of opium has long been adduced by Dr. Ferguson.

In acute peritonitis it has been used with signal success. — Purgatives have been used in this disease, for their

antiphlogistic effect, they are now believed to be doubly injurious by increasing the peristaltic action of the intestines, and causing congestion and tension of the inflamed membrane. Opium then seems to be the treatment which should succeed local, or general depletion.

The attention of the profession was first called to the treatment by this method several years ago by Mr. Bates of Sudbury, who recorded several instances of recovery from severe peritonitis under large and frequent doses of opium, and a rigid adherence to the horizontal posture, the opium being administered by the rectum when not admissible by the mouth.

It has also been employed in peritonitis where the powers of life sink so rapidly, that bleeding either local, or general cannot be allowed, and where mercury cannot be used internally, for fear of exciting the peristaltic action of the bowels, which would tend to rend asunder the recent adhesions.

David that Mr. Prance succeeded in a patient, without obstructing, or stopping blood, in whom that disease had followed paracentesis.

The efficacy of the opeate treatment of this disease cannot be questioned in a more forcible manner, than by the relation of its action in a case quoted

Dr. Watson; that where the most urgent symptoms of perforation had set in for two days, with collapsed countenance, cold extremities, almost imperceptible pulse &c, the administration of Ext. Nux Vomica of the Pharmacopeia in the course of the twenty four hours was followed by the most signal improvement.

Pulse regained fulness, & strength, the extremities became warm, and the countenance lost its hippocratic expression.

Same treatment was continued for still a twenty-four hours, when every symptom of the mucous inflammation had entirely subsided. The bell

felt natural, there was no tendency
on pressure, - the pulse was good, and
the patient declared himself well.
At this period of the case the opiate
was discontinued, and the mildest
possible purgative given as there
had been no stool for 4 days. —
Four evacuations ensued, followed by
the immediate return of the previous
symptoms, and the patient immediately
died. Post Mortem exhibited
a perforation of the intestines.
In enteritis this drug seems equally useful
fulfilling the same indications, and
producing the most salutary effect, when
other drugs are inadmissible.
It is in dysentery that intravenous

disease, in which the physician's life seems staying gradually, not with his unwise exertions, that often becomes a treasure.

Quieting the nervous irritability of the patient, allaying his most distressing sensations, and restraining in a measure degree the morbid proclivities from the kidneys, it will-indeed becomes the main by which for a time we seem to take death off its guard through unwilling fraction.

In this disease it is preferably given in the form of the Tartras Stibii in doses of grs v to die.

In the acute form of that specific inflammatory disease rheumatism, indeed after a full venesection, I have thought that

opium with mercury may be tested to.
The opium should seldom be employed
in combination with calomel when
the symptoms of salivation exhibit
the continued use of the mercury.
In delirium tremens we find it to
be the sheet anchor of the practitioner,
soothing the nervous, agitated system,
procuring that gentle slumber which
tired nature seems so much to covet,
and restoring consciousness and peace
of mind to the raving maniac, the
subject of the blasting influence of
intoxicating drink.
In diarrhoea, it is by some accounted
a good opium of treatment, while in
dysentery it becomes almost a specific.

would be useless as I have before said to enter into a detailed account of the efficacy of this medicine in all those individual diseases, to the relief of which we find its appropriate application, while the diseases in which it may not be used form the exception, the other the rule.
Let us then the diseases which most seem to contra-indicate the use of opium, are phrenetis, apoplexy, paralysis, diminished secretion from the gastro-intestinal mucous membrane, increased action of the vascular system, certain conditions, in diminished sensibility or contractility of the fibres, and should be used with caution.

wet nurses, and fretful women.
Opium may be given in Dentition in the form of a pills, powders, bolus, or electuary.
The variations in the dose is great, and depend on the age, and habit of the patient, nature of the disease &c.
From the 1/8 - grain is a small dose for an adult, from 1/4 - grain being while from grain - V is a free and large dose.
There seems to be no chemical antidote for poisoning by opium.
The stomach should be emptied, by means of stomach pump, emetics &c.
The patient should be roused, by the strict exercise, cold affusion, tartrate

initant applications, rarely not very powerful stimulations &c.

Of the preparations of the Opium Ammoniferum, the Syrup is that which is the most used. —

The preparations of Gum Opii are many, though the most powerful and useful are the Lin. of which about XXV minims are equal to gr. j of the solid opium — the tinctura, a dose for a child of one year, while that of the adult varies as does the solid gum. — The Compound Lin. of which about XVIij minims are equal to guttae j of the Lin. and form an useful paregoric for children. — The Guttae Bijrum or Sedative Opii, —

which is very much stronger than the simple tr. — The Acetated tr. Opii which is not much stronger than the simple tr., and the Dover's Powder which is a compound of Potass Sulphas viij. Opii pul, Ipecac pul ana gr j in which every x grs we obtain gr j of opium. The Potass Sulphas is added to aid in the pulverization, and fusion. The Vini Opii is often used also.

Morphia, or Morphine, from Morpheus the God of Sleep, is peculiar to the opiate principle existing in opium as heretofore described.

It is prepared from pure opium

by precipitating a strong solution of the former by ammonia, or some other substance, and preserve it under the form of transparent crystals, whose primary form is the right rhombic prism. The precise relation which the effects of Morphia and its Salts bear to those of opium is a very unsettled point.

It is employed in preference to opium for endermic medication, and is used in neuralgia, prosopalgia, violent vomiting, &c. —

The Salts of Morphia are given internally when we wish to obtain the anodyne, soothing, sedative, soporific and antispasmodic effects of opium

that the injurious tendency which this drug sometimes and to excite the preparations of Morphia in also many.— The salts in substance and solution alone are used, the salts being the sulphate, Muriate or Hydrochlorate, or the acetate.— The two officinal solutions of Morphia is that of the U.S.P. the strength of which is gr. to the ℥ ij— and Magendie's the strength of which is gr. XVj to the ℥ ij— The dose of the former is about a dessert-spoonfull, that of the latter, much less.—

The salt, of Morphia are given in doses of from two 1/8—

-1/4 of a grain;
For enduring use they may be applied to the extent of [illegible] for 1 — 1/50 — and hence the proper place and [illegible] applicable in this way in traumatic tetanus

Being organized that brevity is the very soul of wit — I have omitted to be witty in that respect, because the subject would not allow me to appear brief; and decidedly failed to appear brief, because I never could be witty —

Reports of Cases
occurring in the
Baltimore Infirmary
Submitted to the Examination
of the
Provost Regents & Faculty of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine

By
Charles Henderson
1858

Introductory

In compliance with the requirements necessary to obtain my Degree I submit to your learned Body "Reports of Cases" as occurring, and noted by myself in the "Baltimore Infirmary" in the wards of which institution I have had the honor to perform the post of Clinical Assistant —

1 Clinical observation
2 Hepatic Abscess
3 Lead Poisoned
4 Syphilitic Rupia
5 Popliteal Aneurism
6 Typhoid Fever —

Clinical Observation

Knowledge, though afar off in the gloomy labyrinths of futurity guarded by the frowns of Mystery, serves by its struggles for freedom to cheer the Student in his toiling over the rugged paths of Science, by the dim and flickering rays which greet his progress, as little by little he wins onward.

Yet in its pursuit we often despair of reaching the goal of our desire, and this, because, we are not content to culle the simple, ripe fruits which grow by the wayside, but wish to revel at once with the beauties of its greatness.

And in is with the Student of Medicine, he finds the grandeur of his profession in the pages of theory, and he turns with disgust from the irksome watchings necessarily attendant upon Clinical Observation.

When we consider the magnitude and importance of the art we wish to attain, the theory which assumes the responsibility of curing and

the ability to thwart the hand of death, it behoves the Student to seek the ~~cause~~ source from whence this theory is adduced. In seeking this he would impress it upon his mind that the only place where he may expect to attain any knowledge with the hope of eventually mastering it, is at the bed-side of sick, in the wards of an Hospital.

But let him not think to attain the ground-work with the same facility with which he can master their deductions which is to be by a little attention. No; it requires more than a little it requires continual attention in watching the various changes of the body in disease, and not only watching but implanting upon his mind what these changes signify as regards the disease from whence they emanate.

This is no easy task, to accomplish. But a task which should be shunned from deciding the fate of his future cases and committed to a skilled man — — — Theory of our profession is

Dangerous without seeing its application, it would the student feel conscious of possessing the power he has not. How can thou teach the bounds and abbearance of Caution or moderation? If you allowed to teach the Cavalry, but it cannot teach the use or the Cavalry, Officers cannot, nor does not allow to teach the most important branch of our art, Instruction & Precaution. It can be learned only by practice upon the Human frame in its normal and abnormal condition. This stands in the first duty of the Student, after he has attained the knowledge of the body & its functions & wants. Notwithstanding our Natural, also Civil & Military frame work and relations, the various duties belonging to the mechanism thereof to study the treatment of the Horse. To be aware of the Power & Force the wants for which it was designed, Instinct which follow when horses in action, and also all Sounds that may possibly follow during

All this is required to become acquainted with the most simple machine which man has ever can invent — If such be the fact how ought we not seriously to find out the various workings of the greatest and most perfect mechanism of mechanism which we designate as the Human Body — and which was designated as its maker to be the receptacle of the Immortal Soul —

It is the "Christian opinion" that man should expect to attain success in his future course, by long years of observation and attention at the "Head-Rules", duties at which our finer feelings will of eternal penalty-pay, which must be endured, and can be, only handled by the simple thought, that the rules under we are examined, is man fail to be evaluated and, he this simple and serious in an hand (we) the good [illegible]

The realization of this thought

will obliterate these debasing feelings of pride from our minds, and learn, and to draw aside the curtains, and behold the beautiful and organized brain falling before the destructive breath of disease. — the consequences of which we will be called in future lectures to see

Case 1st Hepatic Abscess

Other Conditions — Native of Age 35

Occupation — Fireman on the Rail Road,

entered Balt. Infirmary March 14th 1864

History

About 5 years ago, left the residence of his

brother in the upper part of Virginia, to take

a situation as Fireman on the Baltimore

Rail Road. — Continued this employment

in a situation necessarily of much exposure

until about 18 months since, when he removed

with his family, to Illinois where he

settled in a malarious district, and was

attacked, a few days after his arrival with

Intermittent Fever. He chills yielded

to remedies, but left him with a dull

pain in the hepatic region which has

continued ever since, hitherto with a

constant liability to an attack of fever

upon the slightest indiscretion in diet

— He has always been a temperate man

and his assertions in this respect should be

to credit from the Natives of this country
About the middle of February he entered
this institution, had treated by the attending
Physicians for some affection of the liver
and left on the 9th of March last with
all his symptoms greatly relieved
Immediately after being discharged from
the Infirmary, he went to reside with
a brother in St. Francis County in this State,
when this disease returned with increased
severity, aggravated by a deviation the result
of an indulgence in a excursion,
He came at once back to the city and
entered the Houses as above stated —
Present Condition
The patient is about 5 feet 8 inches tall
and of a frame which warrants the belief
that he has at a time been very robust
Face and body exhibit a diffused bilious
tinge, confirmative of a bad congestion

prolabia and hypochondria, (remarkably anemic) an effusion has been a manifest fullness seen over the sacral bone to the hypogastric region which yield to the touch, a sensation of hardness & tension — Has pain of a throbbing and lancinating nature through the region occupied by the swelling, which the patient says comes from sleeping, Pulse quick and hard. Appetite good but has not indulged it on account of the disease — Had seen for the first time by the attending Physicians on Sunday March 15th. Pills prescribed as follows

℞ Acid. hidrocyanat. ℥ii
Acid Nitric ℥i
Aqua ℥viii
Ter — Insert a piece of lint in the — Blister over liver —

Monday 16th Feels easier, Sore sensations of a light color since yesterday, No appetite, Treatment continued —

Thursday 19th December aggravated evacuations tinged with blood, strength very much reduced, more depth, foundered, ordered –

Discontinue Acids Mixture, give Chicken broth, Sago, & brandy, repeated at intervals. Also ℞ Vinct Opii ℥ss ℈x at once, and continue after each operation of bowels,

Saturday 21st, Improved, still complains of much pain over Epigastrium, bowels relaxed but less frequent

ordered = Continue tonics – blister over Epigastrium –

Sunday 22nd, All the general symptoms much more unfavorable, diarrhoea much worse, Pulse feeble and quick, ordered, ℞ Aqua Fœni ℥viii
Glycerine ℥ss
Pulv Opii grx Tinct Fol ℥ss

S. one ter in die

Tuesday 24th No abatement in the diarrhoea

and no improvement in the other symptoms
Pulse scarcely perceptible, ordered, =

℞ Argn Nitras grs IV
Pulv Opii grs III / Aq ft. pils IV

8, one every 8 hours —

Sunday 29th. Had been sinking since my last note, since been continues ordered — Enema of Starch water with Tinct Opii gtts X every 8 hours day

Monday 30th. Very much reduced in flesh, feet much swollen, pinched features Pulse barely perceptible, Sphincters completely relaxed, swelling over liver much increased, colliquative sweats, continue treatment =

Tuesday 31st. Patient died this morning at 8½ O'clock having been in the house 14 days =

Autopsy 8 hours after death

The Liver was found to be very much

enlarged, overlapping the stomach, and extending into the left hypochondriac region. Upon cutting into its substance, it was found to be one mass of pus and purulent matter sufficient to fill a large size wash-hand basin. Mucous coat of stomach much congested. The upper half of the small intestines and nearly the same proportion of the colon presented a series continuous chain of ulcerated patches, and at, or about the beginning of the small intestines had perforated quite through the gut. Spleen much enlarged. No effusion into the peritoneal cavity.

Remarks

Here is a well marked case of hepatitis resulting in abscess and terminating fatally. The causes which tend to it are too numerous those most liable to end in such a

event, to need, more than the passing remark that the "fatality", if such a thing could be, seemed to have clung to the patient from the time he left his home in Virginia. If he had contracted the disease during his employment on the Rail Road, and if it had run the fatal course herein detailed, an abundance of exciting cause could be found in his occupation itself, which exposing him alternately to chilling dews by night and scorching heat of the sunshy day, together with his peculiar duties as fireman — provides exactly the alternations mentioned by author as most frequently productive of depletion. Indeed it is highly probable that the remote cause of his death, and the very exposure, from which he fled to a salubrious district where the disease, if he had the had taint, the foundation is laid,

he enters the Infirmary with a congested if not an inflamed liver, gets rapidly well, & again returns into another hot-bed of Malaria where the poison soon manifests itself. This in a measure supports the argument in favor of malarious districts exerting their noxious influence at all seasons. Chills & fevers are credibly informed of those who have spent their lives in the lower counties of this state, are no uncommon occurrence even in the middle of winter, especially among visitors unaccustomed to the climate.

There is one point of interest, among the many presented by this case which especially attracts the attention of the student, (Watson in his lecture, on this refers to the expressed opinions of Bucknill on the subject of the pale abscess, without expatiating, coinciding in the universality of

of the cause of such abscess stated by Budd, but at the same time, giving the opinion as a very probable fact, Dr. Budd's theory is that in those cases where Dysentery & Hepatic abscess are found to be coincident, it is the Dysentery which produced the abscess, and that the abscess the Pleurisy,

The case I have detailed, is one exactly in point, but in this case it seems to me that there can be no doubt of the succession of events being different from that which Dr. Budd refers to.

Here the congestion of the mucous membrane of the intestines was plainly the result of impeded Portal circulation induced by the attack of Intermittent Fever mentioned in the patient's history.

If the abscess had been owing to Dr. Budd's theory, it would have been the result of absorbed

pus from an ulcerated intestine, the violence of the dysentery would have been seen from the first, whereas the congestion of the lungs preceded the flux –

Case 2nd — Fatal Poison

Thomas Wallace, Seaman, U.S. Steamer
Age 26. Native of Boston Mass. —

June 18th 1857 The above patient
entered the Balto Infirmary this date
complaining of violent pains all over his
body as he entered — he was particularly
in the Thoracic and Abdominal regions
and gave the following

History —

Had been serving on board the U.S. Steamer
Merrimac for 14 mos as ordinary seaman
at the expiration of which time, whilst the
vessel was lying in Hampton Roads, he
he received a fall from the main-top of
the vessel to the deck, a distance of 100 ft
and alighted, upon his feet, he staggered
a distance of 5 ft, when he fell prostrate, onto
deck, the mast broke up and he was
carried to Portsmouth Naval Hospital where he remained
under treatment for one month.

At the expiration of this time, (one month after his admission) he was taken with the violent pains under which he is labouring at present. He remained in the Hospital 4 weeks in all, the last 3 weeks of this time he was treated, for the pains which the Doctors in attendance considered, themselves finding himself no better he came to Balt.e and was prescribed for by an eminent Physician, prescription stating him to have presented himself for treatment in our wards —

June 19th I first saw this man by the Physician on the Medical side, he complained of suffering intensely, being bent, & the more in bed — bowels constipated, urine scanty, heart expecting & offensive complexion sallow, anxious and care-worn expression of countenance, tongue pale, pulse slow and full, skin hot —

and no appetite — order as —

℞ — Ex Colyne gtt v

Ol Jigliæ gtt i ad a pinge

& Hinct Calcis gtts xx Ter in die —

Course 28th. Patient has had 3 motions from his bowels since yesterday morning described them as being lumpy after a dark color, but no relief to his pains —

The Professor on the Surgical side, having had his attention called to the fact that the patient might possibly have received some internal injury from the fact of his having received a fall, he accordingly made an examination but failing to detect any lesion of the internal viscera, he enquired of the patient if there was not some pain or blood of the vessel, which he answered in the affirmative. The patient replied that there was continued pain in the vessel, and further on that he had passed nothing but pain since he

he first went on board. The doctor examined his gums and immediately diagnosed the disease under which the patient was labouring to be lead poison. To his eyes Burton's Blue-line became apparent marked upon the margins of the upper and lower gums; which sign along with the symptoms titled, the stigma of lead poison ordered = ℞

Iod. Potass grs v thrice a day and a purgative. ℞ Cal. Sulphur grs i

Pulv Rhei grs v

June 22nd Much better pain left, cheerful countenance lively, secretions of kidneys & bowels in a good condition — Continue treatment

June 25th Patient homesick, interested in walking about etc, hand & leg free from pain, blue line fainter. Continue treatment

June 29th Patient considered himself entirely well, proved fast better in this

life, blue line, scarcely perceptible, left the house having been just one week, under the skillful treatment of our Eminent Professor, and the effects of that magical remedy, the Codicle of Potash.

Remarks

The above is but a small addition to the innumerable number of unanswerable facts which serve to prove the superiority of the "Practical Knowledge" of our Medical School over all other Schools in America.

But this case coming from one of our Naval Hospitals, where of all other places we would expect most to find such cases, gives us full liberty to make the remark, that those Naval Surgeons who have not graduated at our College could spend a few hours to their advantage by attending the "Clinics" of the Baltimore Infirmary.

Case 3rd Syphilitic Rupia

Negro Boy Slave - Age 23 - Resident of Balt.

April 16th Came in this day with eruption very profuse over his legs and thighs, some of very large size and giving the peculiar appearance of successive layers - oyster shell like - Some again are just in their incipiency appearing as small elevations upon the skin about the size of a pin head.

He states, that he had Syphilis during December of 1856 & January of 57 - and was treated by his Physician who pronounced him cured - after returning to his occupation and continuing therein for one month the eruption came out first on his thighs & spread downward. This being April 1st the day of its appearance the eruption has been out for 16 days without treatment.

On examination the chancre

was still hard, or in other words the tissues where the cancer has existed ordered ℞ Iodide Potassium grs iv ℥ j

Opii

Ipecac āā grs iv by 3 times daily & low diet — The application of Glycerine lead poultice to his sores for the purpose of softening the scabs and causing them to suppurate that had not arrived at maturity.

April 23rd The poultice having produced the desired effect, had ordered

℞ — Ung Nitrat Hydrg 1 part

Adipis 3 parts as application to sores — He was kept on this until the full effects of the Mercury had manifested which was about

May 1st when he had ordered to have one pill, daily, still continues the Ung Nitrat Hydrg to sores.

May 20th Sores have healed leaving a new surface — but have varied still to

continue the Ointment

June 6th Patient left the house this day cured — — —

Remarks

This case is only interesting in the fact of it showing the great care necessary to be observed in the treatment of Syphilis —

Had the patient been directed to continue his Medicine (if Mercury) till all hardness had disappeared at the seat of the chancre in all probability he would not have had a return of the disease, at least not in so short a time, and then not in such a way as his case presented

Primary Syphilis — is not cured until the remaining the least hardness at the seat of the chancre — — —

Case 24th Popliteal Aneurism

William Cole Age 35 Occupation Waiter in private family — Residence Balto.

Admitted Dec. 14th, 1857 —

History

Patient states that about 9 or 10 mos. since while walking down stairs he felt a severe pain in the popliteal space which however did not last long nor did it then prevent him from attending to his duties. He experienced however a dull ache in the region with a sense of bearing in the parts below extending to the foot. He first observed a small swelling in the above named region about one month after he felt the first pain but paid no attention to it until it had increased in size to about the size of a hen's egg which occurred about 3 mos after he noticed the small swelling; it then being 4 mos after the time he felt the first pain. He then applied to a very respectable Practitioner of this city to consult, diagnosed his condition and no doubt applied

appropriate remedies for its alleviation, but finding the malady intractable, must be ligation and division expedient for its relief sent him to our hospital to be operated upon; —

Prof. Smith, after a careful examination of the tumor as well as of the general condition of the patient, expressed the opinion that the obliteration of the tumor would be very likely to necessitate ligation of the femoral artery. Though he said he did not feel willing to subject the patient to such a perilous expedient until other means had been fairly tried to reduce it — He therefore applied the graduated compress and bandage, and the patient being a very strong and vigorous man he recommended other means to be employed to reduce the energy of the heart and arteries among which the most important were — — free bleeding from the arm — perfect rest in the recumbent posture, low diet — and occasional purgatives — This plan of treatment was

strenuously persisted in for several days, with several ~~fresh bleedings~~ at the end of which time, finding no perceptible amelioration of the symptoms and noticing also that the pressure sustained by the compress and bandages was neither perfectly equable as might be desired, he resorted to the very ingenious method of affording such pressure that of employing a small bag of shot directly over the surface of the tumor, this though a source of inconvenience to the patient was a most excellent mode of applying a firm and equable pressure over every part of the tumor.

In this case however it was unattended by any beneficial results, after having remained on several days Mr and the tumor not having decreased in size Mr Smith deemed it expedient to propose the operation of Ligating the Femoral Artery, as being the only resource left under such circumstances. Accordingly on the 10th or 12th day after the patient's admittance into the wards of the Infirmary,

Dr. Smith after describing to the class the various steps of the operation proceeded to make a bold and free incision about 4 inches in length upon the anterior and inner portion of the thigh about 2 inches below Poupart's ligament, dividing the integument and adipose tissues (this being very abundant) down to the sartorious muscle. Striking it he turned it aside for some distance, and exposed the sheath of the femoral vessels. He next divided the sheath by cautious touches with the knife, holding the sheath up with the forceps. The aneurism needle was then introduced behind the artery and compression made upon it by means of his thumb, having the artery between this, was done to ascertain whether the pulsation stopped or continued in the tumor. Finding it had entirely ceased he drew the ligature consisting of a fine piece of Cadolet's silk, and tied the knot. The pulsation having entirely ceased in the tumor he closed the wound

by means of adhesive strips, compresses, and bandages being applied; the patient was taken to his bed and he was ordered to have his leg enveloped in raw-cotton to prevent any unpleasant result which might arise, on account of the necessitated impediment to the circulation thereby diminishing the temperature, No unpleasant consequences followed from this cause however.

The irritation induced by the wound had slight and caused him very little annoyance. His gradual and steady improvement soon gave evidence that sufficient collateral circulation had been established, and on the twenty third day after the operation the ligature separated, by which time the external wound was nearly closed. A few days afterwards the patient left the House, entirely cured of his aneurism as well as of the effects of the remedial measures. And is now attending to his practice Feb. 15th =

Case 5th Typhoid Fever =

Capt. Hedgeway. Residence Eastern Shore of Md

Age 38 =

Saturday June 6th 1857 = Patient entered this day has been unwell since Monday last complains of feeling of weakness in his limbs fullness about his head very little appetite, &c He has been sailing a wood boat during the spring & summer up to this time, consequently much exposed to the heat of the sun together with being more or less constantly exposed to the influence of Malaria in pursuing his vocation, renders him a fit subject wherein to expect the development of some effect of this insidious poison

Sunday 7th The patient was first seen this day by the Prof. in attendance, on the medical side, he complains of dull aching pain in the forehead, & a general feeling of weakness and lassitude, pulse full and strong, tongue coated, skin dry, bowels confined & general symptoms of fever — ordered, 4 cups behind the neck,

and purge of Calomel & Jalap —
Monday 8th Head symptoms relieved, but purge failed to operate, pulse full and strong ordered — Black Draught —
Wednesday 10th Patient much better, is sitting up has some notion of returning home, skin is moist & bowels have been moved twice since yesterday, complains of nothing save a feeling of general weakness and inability to make any exertion — — he continued in this state, until Sunday 14th when symptoms of Typhoid fever made their appearance, 2 or 3 Rose spots discovered on the abdomen, dull appearance of the face — great thirst, tongue coated in the centre, with tip and edges red and glazed, urine frequent ordered — ℞ Quinæ Sul grs iii
Ferri Sul grs ½ every 4 hours —
with Citrate of Potash, mixture, as a refrigerant
Thursday 18th Patient complains of diarrhea which came on last night, 2 evacuations since,

since last night, gurgling discovered for the first time in the right Iliac fossa = pulse 88. complains of inability to sleep, ordered = Chalk mixture = & Dovers powder grs x at night - continue Refrigerant drink = Quina & Ferri still continued

Friday 19th Diarrhoea is evidently bringing him down, bowels gave way in the night & had 5 or 6 greenish watery stools, anxious countenance no appetite since beginning of fever, pulse 88 = ordered ℞ Plumbi Acet grs iii in pills = for diarrhoea = patient had but one evacuation up to 11 o'clk P.M. =

Sunday 21st Diarrhoea checked, but patient evidently worse, skin dry & hot, tongue brownish coat, with patches of red glazed appearance on the back part, great thirst, vacant expression of the countenance, drowsy, delirium evidently approaching - ordered ℞ Cal Purgatum ʒ iss
Pulv Opii ʒ i
Sp Zolu ʒ i
Vinum Lac ℥ iss
Aqua Camphor ℥ viij ; with grum cum ʒ iv

Quina & Ferri continued =

Monday 22nd Patient had a profuse evacuation from his bowels last night at 12 O'clk = stools tinged with blood, got no sleep, slept some since yesterday but not to a great extent = drowsy & great thirst = tongue & teeth covered with sordes great thirst & dryness of skin, (mucous rale) ordered Brandy & water, & had patient sponged with vinegar and water which was gratefully received by patient 4 O'clk P.M. = Was given this morning Acts Plumbi pills for diarrhoea which checked it = has had no evacuation up to this hour, has passed his urine as in health up to this day, but now voids it in bed, but not depending upon over distension of bladder as the catheter has been used twice this day, pulse 90 and weak = took some beef-tea this morning with apparent relish = Quina Ferri & Turpentine Continued with Brandy & water occasionally & Acts Plumbi pills 3 times day, ordered to be again sponged —

Tuesday 23rd Patient evidently passed worse

pulse 95 & feeble, mouth & tongue covered with brownish crust, excessive thirst, no sleep, profuse discharges from the bowels too-like, His wife & family visited him the last night which had excited him, I attribute his general symptoms of this morning to that fact, I should have mentioned that slight subsultus tendinum appeared yesterday; this symptom is much more in degree this morning, incessant twitching of the muscles of the arm, dose of Hot Punch ordered to be increased to pints IV, head shaved & ice applied — 4 O'clock P.M. Pt. very restless, struggles to get out of bed, vomiting of a greenish matter since 2 O'clk, Brandy & water continued pulse 90 =

Wednesday 24th Patient greatly prostrated, pulse 98 — represented to have slept well last night eyes dull & vacant stare, Dr. Chew saw patient about 4 O'clk expressed much doubt for patients life ordered Turpentine Stupe over abdomen

and blister back of neck, 10 O'clk P.M. much
worse pulse 120 speechless, breathing laborious
Thursday 25th, somewhat better this morning
but at 10 O'clk was taken with a violent spasm
pupils dilated, pulse counted 160 but difficult
to catch on account of spasms of the muscles
compelled to hold patient down in bed,
Continued in this state, more or less till 4
O'clk in the afternoon when they subsided
— asked for ice which he chewed, mustard
applied to feet & waists, 10 O'clk symptoms
improved —
Friday 26th, 11 O'clk called to patient who is
in a dying condition, attempting to get out
of bed, horrible convulsions with dilated pupils
in the interval of the spasms, vomiting of
greenish matter, unable to articulate, at
length a violent struggle closed the scene
upon the most horrifying spectacle I have
witnessed in the Baltimore Infirmary —

An

Inaugural Dissertation

on

Menstruation

and one of its important disorders

viz

Amenorrhoea

Submitted to the examination

of the

Provost, Regents & Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Willard A. Hicks

To the Faculty of the
University of Maryland
Gentlemen

In compliance with the regulations laid down in your circular, it becomes obligatory for each and every candidate for the degree of Doctor of Medicine, to submit to your most mature consideration, a Thesis of his own composition upon some subject connected with the Medical Science. In viewing the numberless pathological changes that are constantly taking place in the human body, and the phenomena that accompany them I find it utterly impossible to discover any origin, or any change that it is liable to undergo, but what has been the theme of discussion for men whose intellectual faculties, and literary attainments combined with their

exalted station in life have been enabled to explain with much ease and correctness; but while we feel a sense of inferiority, we have reason to think and believe, that not of little, little will be required, and knowing that from will be as much as feeble efforts, we will take up for consideration, and attempt to define to the best of our ability

Menstruation and one of its important disorders, viz

Amenorrhoea.

Menstruation may be defined to be a sanguinous fluid eliminated by the Uterus and escaping from the Vagina every month, this is called the Catamenia a mensis (mensis meaning month) the consequence of the enlargement of one of the Graffian vesicles and the expulsion of its ovum, constituting the function

menstruation. It was formally held prevailing opinion, and I believe the acknowledged fact among the Profession, that this discharge was a secretion, but from Microscopical observations, and researches of many scientific men, it has been ascertained that the discharge does not differ very materially from arterial blood, and if this can be proven to be an uncontroverted fact the idea that it is not a secretion will no longer be controverted, and we shall be convinced that it is nothing more nor less than an exhalation, or rather filtered through the Uterus and expelled by the external organs. The catamenia in this country appears generally about the fifteenth or sixteenth year, but in warmer climates it

appears earlier, and on the other hand in colder climates later; and when this discharge occurs regularly every month, of usual quantity, and of usual quality, the woman is said to be "regular", and to avoid more direct reference to it at the time we say she is unwell. The symptoms which precede, and accompany the first menstruation are very slight in some cases, but very well marked in others. There is generally a degree of languor and lassitude, dark shade under the eyes, headache, pain in the back, and occasionally there is smart attack of fever. But when the discharge takes place, all the symptoms disappear and the female merely complains of weakness, and exhibits some pallor of countenance. The more perfectly the function

is performed, the less is the distress.

You will observe in our definition of Menstruation that it was the consequence of the enlargement of one of the Graafian vesicles, and the expulsion of its ovum, and we beg leave to entertain, and express the opinion, that in order that coition should prove a successful coition it will be necessary that sexual intercourse take place immediately before or immediately after the menstrual discharge. We wish particularly to be understood on this point; we say then, that in order to produce Impregnation, intercourse should take place, either a short time previous to menstruation, or a short time after, and we are inclined to the opinion, that unless this does take place, no Impregnation can follow.

But further, that if Coition take place about sixteen days after the appearance of the discharge (half way between the monthly) conception will be impossible — because 1st That it is physically impossible to produce conception in the Fallopian tubes 2nd That menstruation is preparatory to conception, in order to bring the ovum down into its proper place in the uterus, to meet, & become into immediate contact with the seminal fluid, so as to produce impregnation of the same.

We will next proceed to consider one of the three interesting classes of diseases, the diseases of Menstruation, and there is no subject fraught with more interest and none that bears so directly upon the health and happiness of the woman as the disorders of the female sexual

apparatus for a great majority of the diseases occurring in Women are the consequence, & depend upon these disorders. The Uterine system is placed in such extensive connection, and sympathy with all other portions of Woman's organism that even the slightest deviation from its healthy standard, is immediately felt in every part of her constitution; and the importance of this subject is more forcibly impressed upon our minds when we reflect how often we are called upon to treat such disorders.

What then are the diseases arising from disordered Menstruation. They naturally divide themselves into three classes (viz)

1st When the discharge is absent altogether

2nd When it appears, but with difficulty.

3rd When it is excessive in quantity.

Were it not for want of time I should consider all three of these infantile diseases, and hereafter though contrary to my intention in the first place, I shall limit myself to one only — viz. When it is absent altogether. This may be accomplished in one of three ways. 1st The fluid may not be effused. 2nd It may be effused, but owing to some obstruction it may not be expelled by the external organs. 3rd It may have appeared and then be suppressed: and we conclude that these three conditions embrace every possible means in which the fluid may be absent, and it only remains for us to consider the causes of these several conditions for us to understand fully and clearly the disease we have now under consideration and which

has received the name of Amenorrhoea. 1st Then Amenorrhoea may result from a failure in the secretion of the Menstrual fluid. We are aware that the essential element of Menstruation is found in the ovary — it is owing to the Maturation and expulsion of the ovum. Hence you perceive that any thing affecting the developement of the ova, would necessarily cause suspension.

Thus we can have no menstruation without perfect activity of the ovaries, therefore no Woman can menstrate before puberty, or after she has lost the power of conception. In other words the ovary exercises controling influence over Menstruation. We thus have a clear view of the causes of this form of Amenorrhoea viz

any thing that destroys the activity of the ovaries; and these causes may be divided into primary and secondary.
The primary causes embrace any thing that may affect the ovary directly. The secondary causes any thing that affects the ovary through the medium of the constitution — Hence any disease may result in Amenorrhoea. I need not say that among the primary causes stands preeminent, the absence of the ovary, for in such cases, menstruation would be utterly impossible. We have of course an incurable Patient, but such cases are rare. And another primary cause would be extirpation of the ovary, but this is a point of little importance — We will proceed to the secondary causes. The ovary

may exist, but fail to execute its functions, because of some change in structure. Thus for example ovarian congestion or inflammation may produce it. But still more decidedly, it may be caused by Ovarian Dropsy, or Ovarian Tumors of any kind, which would of course lead to the destruction of the ovary. The latter form is beyond our assistance for of course if we removed the Tumor the ovary would be destroyed. But if it be owing to Inflammation, unless it has gone so far as to produce disorganization of the ovary, any remedy which relieves that condition, would also relieve the disease. In such instances the treatment would be general or local or both, according to the circumstances of the case, and just the

same as Inflammation occuring in any other organ — Antiphlogistic means. Diagnosis of Ovaritis is generally clear by examination per rectum, in conjunction with the symtoms of the case, the most important of which are, throbbing pain in the ovarian region, more or less fever, and accompanied by swelling, and tenderness, upon pressure.

This brings us to the Second form of Amenorrhoea viz That in which the effusion takes place, but cannot make its appearance or escape externally. This can take place in one of three ways First There may be no outlet to the Uterus Second The Vagina may be obliterated Third The hymen may be anormally firm and thick, thus affording obstruction to the passage of the

Menstrual fluid.

First The Uterus may have no orifice. This may be the result, either of an entire absence of the Os Uteri, or by its obliteration by adhesion, the result of disease. In either case the fluid secreted must necessarily remain within the Uterine cavity & hence we find, that though the patient may exhibit every month all the general signs of menstruation yet no discharge makes its appearance to the exterior, and therefore in the first instance of the term, she does not menstruate. In such a case you would suspect some such obstruction as we are now speaking of. But would not justified in resorting to any manual examination, before proposing such a

step, we should wait for the development of the symptoms, the most important of which is the increase in the size of the Uterus — soon indeed the Patient exhibits external signs of Pregnancy the breasts enlarge, and in some rare cases, begin to secrete milk. Such an array of symptoms would likely deceive even an experienced Practitioner, and it would be of the greatest importance to make a proper diagnosis, for if you should happen to express the opinion that a virtuous young Woman was Pregnant, you would lose, and properly so, all chance of success, as far as the influence of that young Lady and her friends are concerned. A case therefore of this kind would differ from a case of Pregnancy

in the important particular of the increase in size being periodical. That is to say you will always find the increase taking place at each menstrual period — Indeed if there be any difference during the inter-menstrual periods, it would be of the opposite character you would find the size of the womb decreasing from the fact that the thinner portions of the fluid would be more or less absorbed. such a condition would without a doubt reveal obstruction to the discharge of the menstrual fluid somewhere, and you have only to resort to the "Touch" or the "Speculum" in order to satisfy ourselves as to the exact nature & situation of the obstruction.

of it. Obliteration of the vagina, you would recognize it in attempting to introduce the finger into that organ. If however you discover no abnormal condition of that organ, you must introduce the "speculum" when you need with perfect clearness, whether that the uterus never had an out-let, or that it had been closed by the effects of disease, which could be very easily accounted for, and is the most common cause of obliteration of the os uteri. Where this form is seen very, while the other is congenital. In either case the treatment is the same. Lay pure lice into the uterine cavity with a bistoury or trocar, and the opening thus made is to be kept open by the use of bougies

accidents. These cases are rare, but are more amenable to treatment than the next form of which I will speak viz Obliteration of the Vagina — This form of obliteration (as with the Urethra) may be either congenital or secondary — that is caused by disease. The most common cause however, and almost the only one, is Inflammation and Ulceration of the Vaginal walls, and the only possible mode of relief when adhesions have taken place, would be an operation not very difficult when the adhesions are not extensive; but when such is the case it becomes very difficult and dangerous. This brings us to the third and last form of retention of the Urine — viz When

The obstruction is owing to the abnormal development of the Hymen. Sometimes the hymen becomes congenitally so dense as to present an insuperable obstacle to the flow of the menses and thus give rise to retention. The signs are the same general symptoms as the conditions of which we have spoken. The local symptoms are somewhat different for instance, unless it continues for a long time, there is no accompanying enlargement of the abdomen. The diagnosis must be made clear, if any doubt remained upon our mind, by an examination of the parts. In such cases an incision, for treatment must be made in the posterior part of the Hymen.

From what has been said, that the form of Amenorrhœa which we have called Retention is caused either by occlusion of the Uterus or by obliteration of the Vagina, or by Imperforation of the Hymen. In all these cases the Treatment is substantially the same, by surgical means for removing the obstruction.

Nothing yet be the Third and last form of Amenorrhœa by which the menses appear but are imperviously, or permanently suppressed, the accumulation of secretion of the Menses. We can readily understand that this may take place suddenly or gradually, and therefore

two distinct forms of disease; which we call Acute and Chronic suppression.

The adopted in these two forms would be so different, that it is necessary to examine them separately. 1st What Ought we mean by acute suppression? This can only exist in those cases in which the Patient has been in the habit of Menstruating regularly, but owing to some cause, the menses are suddenly stopped. Thus we see a Patient enjoying perfect health, and menstruating with our regularity and abundance, when suddenly she ceases to menstruate and symptoms to which we write presently to be of gen attention, indicate the injury in the Patient, and we are called on to Treat them. Let us first

enquire into the causes that produce such a result, and then we can see more clearly the more in which we may expect to restore the patient to health. We may divide the causes into Physical, Moral and unknown.

Of the Physical causes, by far the most common, is the operation of cold, as getting wet feet, change in dress &c. Among the Physical causes also may be ranked blows, falls, fatigue, abuse of Medicine, indigestion &c. The moral causes are very frequent, and among them may be ranked more particularly fear, fright, anger, grief, excessive joy; in fine, any thing that makes a very decided impression upon the nervous system. Of course in all these

cases we will be at little loss to discover the true cause, if we pay due attention to the history, and circumstances attending each case. It is always important to discover the cause, for in this consists our clearest indication for treatment. What are the symptoms indicated by Acute Suppression. If we recollect the state of congestion that always exists in the sexual organs during Menstruation, you will have little or no difficulty in understanding what would be the effect, if the discharge which relieves this congestion, were suddenly stopped; there would be the same tendency to the flow of blood to these organs, but not being able to escape it accumulates, and gives rise

to an increased state of congestion, which must necessarily produce the ordinary symptoms of such a condition — Hence we would naturally look for pains shooting through the abdomen, a sense of weight in the pelvis and perinæum, a sense of fulness in the hypogastrium — Conditions like these cannot fail to reflect themselves in the nervous system — and then you find the patient suffering from general debility, vertigo, fulness about the head, dimness of vision &c. These symptoms are present in greater, or less degree in almost every every case, but of course they will be modified according to the physical condition of the patient. As for instance, in a plethoric, robust habit, the —

congestion would be increased while on the other hand, in a nervous delicate woman the symptoms of congestion would not be so violent, but the nervous element would predominate and we find it complicated with hysterical symptoms, attended with pain &c. Thus we see that Acute suppression may give rise to two very distinct forms of disease viz an Inflammatory and a nervous irritative form which differ so much in their treatment, that it is necessary to refer to them separately.

First. Inflammatory form. Here as said before, the congestive element predominates, and the Patient complains of pain in the head, and in the region of the Uterus increased by pressure,

breathing short, skin hot, the pulse full, hard, and rapid, every thing indicating high febrile excitement. This form attended by such symptoms, is accompanied with danger, and requires more active treatment than any other derangement of menstruation.

The history of the case reveals suppression, and the symptoms indicate beyond a doubt the existance of inflammation.

As to the treatment, bleeding should be resorted to at once. We must not lose time in giving cordials, fomentations, in order to bring back, & restore the suspended secretion for even were this restored the inflammation would scarcely be diminished, and the disease should be treated as though it were

independent of the suppression. In addition to the bleeding, use active Cathartics, administered in conjunction with antimony. The warm bath will also be a valuable auxilliary, leaving the Patient in it from 30 to 40 minutes — then fomentations of poppies & hops, and if the pain continue, Anodyne injections will often afford great relief. — Sometimes in a few weeks these cases are manifested by decided symptoms of inflammation, and require active antiphlogistic treatment. But the same causes operating upon a woman of opposite constitution that is a delicate, anemic woman, would produce a very different result. In these cases we have few, or no symptoms of inflammation. You will however have

evidences of congestion, such as weight & fulness in the uterine region pain in the head &c, but it differs from that of the inflammatory form in the important particular, of not being fixed, it changes about from one organ, to another it is evidently neuralgic or hysterical. But sometimes, the pain is apparently so fixed in the hypogastrium, and even so increased by pressure, that we are very liable to be led into error, but in all such cases, such an error, will be avoided, if we examine duly into the physical appearance of the patient — and more particularly if we examine the condition of the pulse, which we find nearly natural, or if increased in frequency, it lacks the fullness, and hardness of that of the inflammatory

form. Our indications for treatment are clear.— First—to relieve pain, and then to restore the discharge. The pain is readily relieved by the administration of opium in one of its forms, the Sulph. Morphia is generally to be preferred, as it acts more promptly & is less apt to disagree with the Patient, than opium or its Tinc. prescribe grs. which generally produces its nauseant, as well as its anodyne effects. Should hysterical symptoms be present in any marked degree, we will be greatly aided by the addition of Valerian, and no form, we believe is better than the fluid ext. of which we may give ʒj. with Sulph Morphia grs. In addition to this we would place the Patient in a Warm bath— the sitz bath

is the best, & then apply warm fomentations to the vulva, or inside of the thighs. Such means will generally succeed, not only in relieving the pain, but in restoring the menstrual discharge, & thus we effect a cure of the disease.
In all these cases we must impress upon the mind of the patient, the great importance of avoiding every thing that would lead to reproduce a suppression, such as exposure of any kind; requesting her to dress warmly, that non stimulating, and to avoid all mental, and physical excitement, and to do every thing to encourage the continuance of the discharge. But in some cases, in spite of the utmost care, and the most judicious treatment, we fail to reestablish

the menses at that period, and they fail to appear at the subsequent periods, and we have then to deal with Chronic Suppression. This form may result from a variety of causes. It may result from the acute passing into Chronic suppression or it may result from any disease, or malformation, which gradually diminishes the quantity of the discharge until finally it disappears altogether. 1st Then it may result from the acute inflammatory suppression. In such a case, we would clearly have to deal with a case of Chronic congestion or Chronic inflammation of the Uterus, and of course would adopt treatment appropriate for Chronic inflammation in general and if we ac-

ceed in curing that condition, we re-establish the menstrual discharge. It may also result from the acute nervous form — in this case we would examine into the physical condition of the Patient and relieve any disease under which she is labouring — also to improve her general health by the use of Tonics, generous diet &c, restore the healthy action of the nervous system by Tonics and antispasmodics. Thus we have an treatment upon scientific principles, continue it during the intermenstrual periods, and then as the next menstrual period approaches, use such local means, as we adopted in the case of the primary suppression, such as hip-bath &c. This we

might add electricity, which should be used with care.

But in every case of Chronic Suppression, the chief object of our investigation should be to discover the cause, and whatever that may be to address our treatment to that one point. In the next place there are some forms of Amenorrhoea, as we have already stated, that do not seem to be owing to any special cause. All we know is, that the Women ought to menstruate, but does not, and in such cases, so long as the Patient's health is not affected, we have nothing to do. We should never interfere until we see some derangement of the health.

There is only one other

form of suppression of which we will speak — viz. that which attends, the final suppression of the Catamenia, at what is called the "Change of life" We stated when speaking of Menstruation, this discharge usually made its appearance at 15. & continued as long as the ovaries retained their activity. That this period should vary in different persons, is what we would naturally expect, if we consider the diversity of constitutions that is manifested among Women. The age however at which it most generally take place is 45 or more properly speaking between 40 & 50. But it is impossible to fix any exact period. Both Menstrual discharge may be

established without giving rise to any ill effects, so may it cease without the least discomfort to the woman. But it may, and does, at times produce serious consequences — the patient is left in permanently delicate health. And from this period date most of the malignant diseases to which woman is subject. We do not however to be understood as saying, that cancers never make their appearance prior to this age — for it sometimes does, but the statements, and experience of old physicians warrant us in expressing the opinion that woman is more liable to such developements after the cessation of the menses, than she is before.

Hence this period becomes one of interest to the Practitioner, and it is important that his attention should be directed towards it, so that he may be prepared to interfere at the proper time.

An
Inaugural Dissertation
on Fractures
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By

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Fractures

The bones, of the human body, form as it were, the framework of the building; they give it form, and strength by affording points for the attachment of muscles and ligaments; they support the body, and the more delicate organs, and resist violence which is often brought to bear upon them, both accidental, and intentional they are acted, to protect vital and important organs; therein contained; as well as around or the passage of bodies, and important vessels: they are so formed, that we can move them in almost any direction, to which we are enabled to avoid many injuries. We are indebted for their strength, to protect ourselves from many violent forces that are imbibed against us and we if not for their strength, and elasticity we would be more apt to be disabled. But, notwithstanding

else, in this world; they are liable to meet with many hard rubs, and knocks, which sometimes prove very serious, and in some cases may even cause death, by inflammation from the irritation produced. Bones are also subject to varieties of disease; they are composed of Phosphate of lime and animal matter. Lime may be removed almost to infinite, by two modes; viz by baking, and by soaking it in muriatic acid, diluted. here, we destroy the earthy matter, and we have the bone so flexible, that we can tie it in a knot.

The subject of which I propose to treat, or, relating to the bones, is Fracture. This is one of the most important subjects that we have to treat in surgery, and it demands particular attention in order that we may be enabled

of recognizing it, and treating it as it should be; for there are cases where the young, (if not the old) practitioner is at a loss to tell if fracture exist; but by proper study, combined with practical, demonstration; we are enabled to diagnose generally correctly. The skeleton, is divisable into five portions, viz 1 The vertebral column or the central axis, 2 the head and face or what is called the superior development of the central axis, 3 the thorax, 4 thoracic arch, and upper extremities, 5 the pelvic arch and lower extremities. We have the bones also divided into three classes; 1 the long, 2 the flat, 3 the irregular. The long bones are those that are principally found in the extremities. these are divisible into a shaft, and two extremities, the shaft is cylindrical, or fusiform

very dense, and hard in texture. hollow in-
side, or what is called, a medullary canal:
which in health, is filled with marrow.
The extremities are broad, to articulate with
adjacent bones, they are cancelated, in their
structure, which, renders them very strong.
a small portion of this cancelated structure,
is capable of bearing an enormous weight.
The flat bones, are those which are composed,
of two layers of dense bone, having a layer of cellular
or cancelated bone intervening; as the bones of the
head. sternum &c. The irregular bones, are those,
that remain after selecting the long and flat.
the bones of this class, are, those that are irregular in
their shape, and have some parts flat and thin.
others thick, and short. such as the vertebra &c.
From the general description given of

the bones we at once see that some are more likely to be fractured than others; and the principal fractures that we have to treat; are, those of the long bones, particularly those of the lower extremities. any bone, in the body, may be broken. but we seldom see any injured; except the long, in old persons fracture of the neck of the femur, is often produced; by falling on the great trochanter. In children, the femur, humerus, and clavicle, are the bones most often fractured. In infants, fracture of the clavicle, is of frequent occurrence. Fracture, may occur at any age. Before going any further it would be better to give the meaning of the word Fracture; It is a solution of continuity in a bone. The causes of fracture, may be divided, into two classes; Predisposing and exciting; The predisposing causes, are anything, which renders the bone more likely to be broken than common, as old age, so how we have

a deficiency of earthy matter, and the animal matter having lost its elasticity, and this renders the bone soft and brittle; disease of the bone; may weaken them; the same as any other part of the human body. Disease of certain character may cause fracture, as cancer, or necrosis, of this latter disease causing fracture; we had a practical illustration at the infirmary. The case was a little boy, about twelve years of age, received an injury to his leg; and this coming on a scrofulous constitution, called forth the disease of the bone; which resulted finally in a spontaneous fracture, first simple, then compound, was we might say, & think for want of better treatment.

In some bones, the bones are naturally brittle, or what is called congenital conformation; and here, fracture, is often of frequent occurrence.

We may divide the exciting cause,

into two divisions; Mechanical, and Muscular;

Mechanical violence, may be direct, or indirect,

it is direct, when a bone is broken by a foreign body,

coming in contact with it directly, as in case when

the arm is broken, in endeavoring to protect the head

from a club. It indirect, when the force applied

to two extremities of a bone and it gives way between,

as for instance, a person gets his foot caught, in turn to

pieces of timber, and he falls forward, here, we have two

forces acting against each other, the upper part of the

body acting as a lever, and the timber as a fulcrum;

the bone acted upon by two forces, it is snapped off.

This is called fracture by the counter stroke.

Fracture produced by muscular action

occurs most often in the Patella, and Olecranon. but,

any of the bones may be fractured in the same way,

if they be in a proper state, if a force be acting

in the dark, on board of a ship, and fall down the hatch way, he may have no bones broken at all; and we may ask why? simply because he had no time to brace himself for the fall, the muscles being all relaxed at the time he fell, and avoids fracture; on the other hand; a person sees he must fall, he braces himself for it: he renders the muscles tense and hard, and they are so resisting, that when they come in contact with any hard body, they cause fracture in some instances, in others dislocation. Fractures are divided into Simple, Compound, and Comminuted; by a Simple fracture, we mean, where we have a bone broken in only one place, and no material injury to the soft parts.

A compound fracture, is one where the soft parts become involved; the wound communicating with the fracture; a simple fracture may be attended with a wound, but if it does not communicate with

the fracture, it will still be simple; a fracture may be rendered compound, by the same violence which broke the bone; or a simple fracture may result in a compound fracture, by subsequent inversion and slougging, from the injury to the soft parts.

In cases where the bone is broken in many pieces and the soft parts involved, it is a compound comminuted fracture; or if there is no injury to the soft parts it is simply comminuted. [illegible] Varieties of fracture, depends entirely, upon the amount of injury inflicted. In cases where there is great shock to the nervous system, with the loss much blood, death may ensue in a few hours. Inflammation, and then, may supervene; or, as may be, abscess and suppuration, and may produce necrosis and [illegible] the bone is very much shattered, and the disorganization and [illegible] is much [illegible] the [illegible]

causing a communication between a joint and the external air; and this opening cannot be closed; the surest remedy is amputation; particularly, if it be the knee joint affected, but if the patient be young and of a good constitution, we may be able to save the limb; but if the joint be crushed, we must not hesitate in using the knife.

Such injuries in old persons, of debilitated constitution, always amputate. The wound that characterises the compound fracture, is of great importance, in regard to the danger or difficulty in the cure of the fracture. It may cause inflamation, and this may result in suppuration, or gangrene. death may result, without any remarkable local change, merely from the violent constitutional disorder; the inflamation of many joint may be caused by the admission of air into it; and may be carried on and of vital action; the parts be so crushed and lacerated in such a manner, as to cause sloughs; and a wound

of the deranged state of the system, it is impossible to arrest the gangrenous inflammation, which extends to the surrounding tissues, and the poison is absorbed, and the whole system becomes charged and death ensues.

Here, in such a case, some save the patient by amputation: this is an important question to decide; but, we must give our patient every chance; and we know there is sometimes a recovery after removing gangrenous limbs; in deranged constitutions, where the patient is a hybrid state; amputation, will be of no benefit, for the stump will not heal, and it is apt to take on inflammation, which results fatally.

Recoveries, after amputation, in some cases are very surprising indeed; patients have been snatched almost from the grave by it: in such cases we remove the cause of the irritation to the constitution, and every results. There are cases where we have to use the knife,

before inflammation has set in. The question arises: when are we to amputate? can it be performed directly after the injury? This depends upon the nature of the case; the rule is, not to amputate until reaction takes place: that is, in cases where the injury has caused great shock and depression; in cases, where we have an important artery wounded, and we cannot arrest the hemorage, we must amputate, in cases where the femur is broken and the artery and vein divided we must amputate; The arteries may become involved in simple and compound fracture; but if the wound be caused by crushing violence; as in comminuted fracture, the vessels are not able to bleed, the ends being ragged, they collapse, and thus, prevent hemorage; but all cases do not present such a favorable appearance, for a splinter of bone may puncture the artery, and then, we have hemorage; which may come out or not, as the instrument

may close the wound, as to cause it, to flow in a continued stream; or, we may have no external flow of blood at all; this, as the case, when the artery is punctured, and there is no external injury; here, hemorrage goes on internally, characterised by dark colored diffusion, and tumefaction of the limb; with coldness and want of pulsation below the injury; here if there is no other symptom which calls for amputation; we may tie the artery. compound comminuted fracture, of the upper two thirds of the thigh, always requires amputation.

When amputation is to be performed it should be Primary; that is, before accession of fevered inflammation; at the same time, we must not be too fast in using the knife directly, after the injury; if a patient, have a low pulse, cold skin, faintness, or the symptoms extreme collapse; we must revive him, by giving cordials, and applying warmth. but, if the loss of blood caused

the sinking, we must keep a look out for hemorrage after reaction. Primary amputation, has resulted far better than secondary. Take an opposite case to the one above, where, instead of collapse, the patient is restless, and raving with pain, and insists upon the operation, there are cases where it is best to comply with the demand for the knife here, will relate him as much harm as the pain; so here the sooner the operation, the better it is. A fracture may occur near the condyles of the femur, and the gastrocnemius muscle, pull the lower fragment down in such a way as to make the artery tense, and thereby distroy circulation in the leg, and then we may have to amputate; when the fracture has occurred, the knife is often used

The removal of a fracture, is a certain illustration of others, here to run; the first step, in the process of healing a tense aneurism is

the effusion of lymph into the cellular tissue around the fractured bone; this lymph, gradually becomes thick and hardened into a cartilaginous callus, called Provisional callus; this adheres to the sine ways formed, above, and below the fracture, and completely encloses the fracture, this process occupies about three weeks; now ossification, begins, and by the end of two or three weeks more, the bone is strong enough to use. There is also a process going on in the midst of the bone, which aids in the union of it; this is, the deposit of a quantity of matter, forming a sort of peg extending from the fractured extremity, up into the bone, this aids in holding the fracture in adhesion. After the provisional callus becomes ossified, the fracture is not directly united, and if we remove the provisional callus, the bone would be easily dislocated; but at end of five or six months, bony matter is deposited between, the fracture, and the provisional callus is absorbed: now, the bone is perfectly sound; in fact, it is for

more durable where the fracture existed, than other parts of the bone; for it will break in an other place if violence be used. There are certain bones which when fractured have no provisional callus formed; we have cases of this kind in fractures of the cranium, femur head, patella, and any bone invested by a synovial membrane; or, if a bone be broken, and there results no displacement of it, there is no provisional callus. and a fractured bone be kept in strict apposition bony union may take place in three months but if a portion of a bone be removed, and the two extremities are not in apposition we are apt to have union by a ligament; this may be ossified after a long time.

We may ask why provisional callus is not thrown out at all fractured bones? this is obvious enough, for if it were poured out in fractures of the bones of the cranium; the result would be a

serious nature, for here, we would have a foreign body lies-
-ing on the brain; in the joints callus would be apt to
prove troublesome if not serious. The union of a bone
depends upon various circumstances, such as age, con-
stitution, and peculiar circumstances of the patient;
the vital powers of a patient, may be exausted by debil-
ity, or the system may be under the influence of disease,
which debilitates the constitution, such as syphilis, or gout,
or changing about causing the fragments to rub upon each
other, any acute disease, or fever may retard union; it is
also said, pregnancy retards it, here we have the nutri-
tive powers of the system occupied in the development
of the fœtus; therefore the drain on retarding forces.
An injury to the nervous system may also retard
union, for if we have an injury to the spinal marrow,
and paralytic results, such is the case that the limb will
not unite which is paralysed; with a fracture in another

one will if not halsed unite readily. In fractures all mercurial preparations ought to be avoided, for they retard union also.

The symptoms of a fracture are three. deformity when compared with opposite limb, as twisting, shortening, bending, and we have preternatural motion, that is where we can move the limb in an unnatural direction, as in cases of fracture of the middle of the femur, we grasp the upper part of the thigh, while an assistant takes hold of the lower, and by raising the leg we find the upper part does not rise, without Crepitus or a grating of the connected ends of the bone, may be produced when the part is moved; this sound may be distroyed by the lower fragment overlapping the upper, or the soft parts may have engaged between the ends of the bone, the tendons, may fracture the connect, by friction upon themselves; therefore ob-

tus is not a certain diagnostic sign: combined with these symptoms, the patient will have more or less pain and swelling, and loss of power to move the limb as previous; any effort made by us to move the limb generally causes excruciating pain. The cause of displacement and deformity after a fracture, should be well looked to, for it is very important to know, in order that we may counteract them if possible; there are three, muscular action, which produces bending, shortening, or twisting. secondly, the weight of parts below the fracture, as in fractured clavicle, the shoulder drops and causes the fragments to overlap. thirdly, the displacement may result from the original violence which produced the fracture; as when the malar bone is driven in.

The indications of treatment of fractures are important ones, first to bring the long ends in apposition, then we must manfully maintain them in position, and lastly we must cure union, so to do this we must infer the seat of the

to prevent deformity, and this we have to use splints and supports to obviate any tendency to displacement in muscular action, we must place the limb if it be any fractured in a position to relax the muscle or muscles that cause such displacement, as in fracture of the upper end of the radius, the elbow must be bent, or in other words, we must flex the arm to relax the biceps muscle; and in fracture of the olecranon, we have to extend the arm to relax the triceps, we must always in treating fractures, be careful to make our patient comfortable; then in cases where we cannot extention, or counteract so, we must do so by mechanical means, as the case may require. To reduce a fracture we must hold the upper portion steady, while the lower be drawn in a direction calculated to replace the parts naturally, this should be made gradually, and gently, at the same time steadily, so as to overcome the spasmodic contraction of the muscles, otherwise we will only aggravate that which we wish to overcome; for a

general terms, we have to use very little care to keep the bone in
apposition, some practitioners, bandage a limb entirely, they
say, to prevent oedema and the contraction of muscles, or
they will throw the bone out of apposition, but this is more
harm than good; therefore, we do not use them; they increase
the heat of the part, too much, but it is indispensible to use
some mechanical contrivance to hold the bone in apposition,
and retain the natural form of the limb; for this purpose,
various ingenious splints and fracture boxes have been used,
but they are not all as suitable as they look; some splints are
wood curved in the shape of a limb, but all limbs are not
formed alike, therefore such splints cannot be suitable to
all cases, but may do well for some; two or three straight
splints, which when used should be bolted or strapped
firmly to the limb, but these are heavy and have to be
the bed, and when the patient moves it moves the
splints, consequently we have the bone rubbing against

which, may produce false joint; when these splints are used, they must extend above and below the fracture some distance. Starched, pasteboard splints are used, and may be used with better results than some splints in simple fractures; for it grasps the parts better and adapts itself to them.

When we have to anterior splint for fractures of the inner extremeties which is far preferable to any other we in use, it was invented by Prof. N. H. Smith of this city it is simple and cheap and the results from its use are highly satisfactory; it is easily applied to the limb and when on good terms, we can use it on either adults or children in children it is an excellent splint to use, for they are restless and will move about; with this splint we can do without a bandage of displacing the bone. a compound fracture, we can lift the splint so that we can command a view of the injury to the soft parts at any time without disturbing the fracture. and the limb is easily under it and we can make any

amount of extension we require by making the end of the limb which supported. Now to speak of the symptoms of the various forms of fracture; we will first consider the simple form; this as stated before, consists of a fracture in only one place, and, no injury to integument externally, the symptoms are distortion or deviation from the natural shape, and displacement of the bone by muscular contraction, which may cause displacement with shortening of the limb, loss of natural form over the limb, then preternatural mobility of the limb, united with swelling from effusion of blood, which forms ecchymosis in some cases, great pain in the part, and rather severe spasmodic twitchings of the muscles, caused by the soft parts becoming irritated by the sharp points of bone, crepitus when the limb is moved, but this sign is not always when the fracture as stated before, but it is valuable combined with other symptoms; and we may be confined and no displacement, then no crepitus exists, there is a case related where

fracture of this kind was produced, and a surgeon tested it, but the patient thinking no fracture existed, took off the splint, and danced about the room, for some minutes, then the bone became unlocked, and the patient, by so doing produced a compound fracture. The treatment of the case as previously stated in the general form, viz when an inner extremity, apply anterior splint; if asper, use splints and pasteboard or starched bandages, then we must treat symptoms as they present, in the treatment of a fracture, it is impossible to follow the rules of book-writers strictly, a great deal depends upon the surgeons skill, in obtaining and retaining bone in correct apposition. If a patient be feverish, give him cordials to revive him, or if little to relieve pain and procure sleep, or if inflammation supervene, use leeches and cold applications, or we may have less pain, and bleed from the arm, this is rarely required: we should never bandage a limb up too tightly, we should always have the

a long time; for swelling may come on and the bruise ends
sloughing and gangrene, when we neglect seeing a patient
whose limb is bandaged up, then for some time, and we of
his family, tells us, he was in excellent health for some days
or hours, but it had suddenly subsided, we must expect
sloughing or mortification. A compound fracture is
one where the soft parts are involved; it may result from
a simple fracture, the parts sloughing, the bone may be forced
through the soft parts by a ball, or the violence which broke
the bone may produce it, as rail road carnation, this form of
fracture is more difficult to cure than the simple, as we
apt to have inflammation and fever set in, which may result in
suppuration or mangrene, and finally death, particularly in
old diseased constitutions. here, the first indication is to convert
it into a simple fracture by healing the wound by the first
intention, so we clean the parts and remove substance
which we may suppose, the [illegible]

saturated with blood. We may have a case where the ends of the bone protrude, and we cannot replace them, and it is not advisable in all cases to enlarge the wound, or use much force to replace them, so we saw a portion of the bone off, at the same time, care should be taken and avoid tearing off the periosteum, for fear of inflammation of the bone; after the bone is replaced, we apply our splint, or splints, as it may require, applying them so we can get at the wound to dress it without disturbing the bone, keep the bandages for stiffness may arise from bad treatment, if inflammation arise treat on general principals, use antiphlogistic remedies, bleed either locally, or generally, keep warm or cool application as the patient desires; if matter forms and bursts, lay it open, if we succeed in arresting inflammation, we must not carry the relaxing agents too far, for fear of depression, we must use gentle cathartics after all, we should have the limb, we find it is beyond our power to save it, and the

condition of things may call for an amputation.

A comminuted fracture, is where the bone is broken into fragments or crushed; this is difficult of treatment also, and may result into a compound comminuted fracture, by slough, but if it do not inflame or slough, we must put the bones in a position and treat as directed in former pages, and symptoms as they present; or if it result in a compound comminuted fracture, it will demand extra treatment. This form of fracture is usually produced by some heavy crushing instrument, as a rail-road car wheel; and we can easily make our diagnosis by the unusual appearance of the limb, and the mutilation attended with depression of the bone at seat of fracture; and have preternatural mobility in front part, bone, or limb than the part, then in the other direction, if there is chance of saving the limb, we examine for foreign substances, which must be removed, if there be any

splinters of bone, loose in the wound, they should be removed; for if allowed to remain they may produce trouble, but there are instances where they have become imbedded in the bronchial calles, and adhered to the bone even after being deprived of their harvestum. but if we can get these splinters out it is better; but we must try and avoid disturbing the wound; use splint in treatment and if inflammation set in open the bowels, which should be done in all cases, and use leeches, bleeding from arm, if called for, and if very bad, a warm bath; if inflammation can't be quieted we may have to give anodynes, and same thing for if the patient on the other hand be weak, and in a collapsed state, we must give stimulants and tonics, but neither of the two forms of treatment must be carried too far. In fracture of the femur, by amputating the thigh, the middle, to amputate; the knee joint, the ankle joint, or parts. If by mismanagement, a fracture

unite crookedly; we may correct the deformity by bending or breaking the bone over again. This may be done before the fourth week; some writers say one month after at least five months; but the operation is difficult, and very painful, and unless it be requested, or it interferes the movement of the limb, it is not to be put to risk in the bone; unless it be our fault the deformity resulted, and we wish to save our reputation, but we must avoid such ill results by better management.

False joints may result from a fracture not uniting, or it may unite by ligament, the nutrition of the bone may interrupt the formation of callus; the ends of the bone become rounded, and the cavity embrace, then these are surrounded by a fibrous ligament; sometimes this union is very loose if we move the limb a little, it will bend to former union but after a little point has formed, we must obliterate the dorsal

bandage, and obtain perfect rest in the part, and keep the bones in contact; if this does not succeed we may try the plan proposed by Dr Physick which consists in passing a skein of silk or cotton between the ends of the bone, and allowing it to remain until it appears from the increasing strength of the limb that new bone begins to form, then it may be withdrawn and the splints applied; should this means not succeed we may cut down upon the bone and make the other, and make patient easier with but it should be supported by a starched bandage, we may pass a bent wire in the false joint and produce inflammation which may cause union; lastly we may have to cut down upon the bones and remove their ends with a saw or some other instrument; this is to be preceded by a piece of muscle bigger below, so as not cut it, the operation is most severe and dangerous, and should never be resorted to until the very last resort

An
Inaugural Dissertation
On
Dyspepsia
Submitted to the Examination
Of the
Provost Regents and Faculty of Physic
Of the
University of Maryland
for the
Degree of Doctor of Medicine
By
Wm Worthington Hopkins
1858.

Chorea

After having gone through the necessary preliminaries to becoming a Practitioner of Medicine, so far as studying the required time and attending the [illegible] of the [illegible] of the [illegible] whose qualifications as lecturers and skill in practice are second to no others in the Union, it now behooves me as a candidate [illegible] to write a dissertation upon one of the many maladies that come under

the notice of the profession, and more urgently call upon the Profession for medical aid.

And in making a selection I have chosen one that is not less interesting on account of its frequent occurrence, than for its frequent complications. We will define it to be a depression or diminution of the lower of the dentiform process, and it is higher that the Physician should thoroughly acquaint himself with its symptoms and causes for two reasons, first that he may be able to distinguish it from other diseases whose symptoms are nearly allied. And secondly that he may be qualified for the treatment of such diseases

In commencing this thesis it will be convenient in the first place to note some of its most prominent symptoms, secondly a certain [illegible] of the disease, thirdly to determine the cause or causes [illegible] to produce, further to [illegible] lesions that are produced, [illegible] the morbid [illegible] [illegible]

Symptoms. Want of appetite or in medical language Anorexia, which amounts not only to want [illegible] for food but sometimes even [illegible] in addition to this there is a depraved appetite a wish for something [illegible]

is not for something that in a healthy state of the organs of digestion the patient would not only not have a desire for but would be disgusting to both his and taste. There are many cases where the stomach has been so much out of order as to have a desire for chalk lime, slate pencils and many other things that the stomach in a healthy state would not relish. Sometimes there is a great craving for raw flesh. One case is on record of man which laboring under this complaint ate a [illegible] leaving the intestines, but in a short time ate them also, though cases of such species are very rare & [illegible] young

Lady who had a desire for something to eat; but for her life she could not tell what. And the only thing that I know of her finding was her fingers and in endeavoring for her single meal she suffer was the washing of dishes.

And on the other hand instead of having a deficient desire for food there is a wish for more than is necessary for the support of the human. As an instance of this we will relate a case recorded in a Medical Journal, of a French Prisoner who ate before his desire for food was satisfied ten pounds of mutton under the circumstances he was in. saw bones together with several pistols [illegible] and in doing so he [illegible]

in this affection is covered with a yellow fur particularly in the morning when rising creating an unpleasant taste in the mouth. Often the breath is not only unpleasant and offensive to the patients but also to those who may approach them. Constipation is not of unfrequent occurrence in this Malady: Sometimes merely Air more or less unpleasant to the taste: at other times, [illegible] giving no doubt to the contents of the Stomach undergoing a process of fermentation. Vomiting occurs tolerably frequently when particular kinds of Aliment are taken into the Stomach, [illegible] as to throw the food up immediately

without it undergoing any change, sometimes there is an acrid secretion containing a quantity of muriatic acid; this takes place more or less frequently but sometimes at regular intervals, as in the premonitory stage of cholera morbus. Pain in the stomach is frequently experienced in the morning, and of tightness over the Epigastrium after meals. but again the pain is not local but of a running character shifting up and down the extremities, and of a burning sensation. The bowels are in this disease generally costive but at other times in the opposite state, viz.

Headache is a frequent symptom, [illegible]

but often it is not, we have seen cases for its presence, assuming for time an intermitting character. The minds of those laboring under this disease is many always excited, they cannot give their attention to one thing for any length of time: they have a dull and stupid feeling; but upon the other hand they may be in an opposite condition inclined to confidence, [illegible] generally may be very [illegible] they may be of a mild and even disposition naturally. The mind is never only affected on some of a [illegible] idea ever and anon in [illegible] at [illegible] it is [illegible] and [illegible] to [illegible] [illegible]

sometimes it is slow, and again it is full and frequent. And at othertimes intermittingin nature. The fever is very sudden, and the epidemic cold but when there is much debility the surface is moist and covered with perspiration.

Chronic. The white is distinguishing malady from other diseases whose symptoms are alike, it is the very important, for without such power we may prescribe medicines that would aggravate instead of palliate the disease. [illegible] the wish of the attendants

Chronic Gastritis is the disease most likely to be mistaken for it, and some care is required in distinguishing

between the two. The pain as well as the tenderness over the epigastrium in the disease under consideration is not so severe as in gastritis. Stimulants which ~~cause~~ will often moderate the symptoms in true and uncomplicated dyspepsia, will produce quite an opposite effect in inflammation of the Stomach, such as in gastritis. The matter thrown up in the act of vomiting is generally mucus and sometimes bloody. But these symptoms should not lead us to pronounce the disease simply gastritis. For if such is our opinion we will be called upon to treat another affection of a different nature, upon the behalving of the opinion which may

Hypochondria for they are often found existing together

Causes of which there are many one however of itself is quite sufficient to give rise to the disease but more frequently have we have men as the writers

Nature has endowed us with teeth and [illegible] [illegible] [illegible]

power of fanning our food with its fluid
equivalents in the changes it undergoes within
the living system. And if although in
of such means we are not so often reduced,
days of hog would be the lot of, Yet
we will see as cause of the usually insufficient
mastication: which permits the food, to enter
the Stomach unbreaked in two ways — 1st
crudely triturated and consequently not sufficiently
mixed with the secretions of the
mouth. And in this way acts in producing
the disease, it forms in consequence of
not being sufficiently free of any obstruction
of the gastric juice through its
particles: which is necessary for a quick
and easy digestion. Second for in cases
it is another and a very frequent cause.

As there are many persons who do not allow themselves time for sufficient and due mastication; probably there are many more who not only allow themselves time for that process; but destroy time and stomach by taking food in greater quantities than nature requires: nor have the stomach can manage. And consequently the tone of the stomach is destroyed. debility, sickness and dyspepsia is produced. The use of food that is proper and required for nutrition at one time: when the body for instance has been exercised to a considerable degree, is such as should not be taken when the body is in combustion in a state of rest: then as the gastric juice is secreted in small quantities only as is required for

digesting the food desired by the system
for its nutrition it is called upon to perform
more than its work, and as denutrition
is always followed by more or less depression
so does the gastric juice become less active
in consequence its office on account giving
over tasks by its stimulant - which is
food. Food taken into the stomach
that is particularly difficult of digest-
ion acts in the same way in producing
dyspepsia it creates uneasiness, restlessness
and debility is the sequence; though
food that is difficult of digestion is
relative, for some articles can and are
[illegible]
that works is highly interesting for
some following [illegible]

Excessive use of Opium Hypocrite
Stimulants Coffee and Strong tea
may be classed with the injurious effects
of foods for they like them reduce us
due excitement and are followed by
debility. Whatever draws off the nervous
energy from the Stomach by concentrat
ing it elsewhere act by lessening the
quantity of nutrition in proportion
debility and as long as we will use
the [illegible] = [illegible] make
such a [illegible] for it also happens
that the food [illegible]
to repair [illegible] of the
[illegible] a [illegible]
[illegible] of [illegible]
[illegible] debility of nourishment - to the waste

of the [illegible] satisfy their appetite by eating to excess [illegible] thereby becoming dull both in body and mind. [illegible] at table [illegible] his plate he concludes that he has demolished the chicken and had finished his dinner but as he does not eat the bones there were no unpleasant symptoms. Had he partaken of the chicken when his mind was in such a state probably a [illegible] would have [illegible] opinion.

Pathology. This we have anticipated in considering the causes of the malady. It is a [illegible] in the stomach to perform its offi-

in a healthy and proper manner, produced
or arising from a want of due amount
of nervous influence, or debility caused
by the loss of usual agents: (Accustomed
stimulants) The office of the stomach
is first to [illegible] food into a [illegible]
[illegible] for digestion, the food [illegible]
for the [illegible] of the [illegible] [illegible]
by its involuntary movements to mix
its secretions with the food in the pro-
cess of chymification. A failure in the
stomach to perform these functions may
be termed Dyspepsia. A non performance
[illegible]
[illegible]
[illegible]
in the stomach undigested becomes a foreign

[illegible] of [illegible] a [illegible] of [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
as we have noticed in considering the Symptoms of this Malady. Eructations. It may produce as foreign substances do, inflammation [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
eructations in other organs. The Liver frequently refuses to ~~perform~~ supply its usual quantity and quality of secretions. The Pancreas [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

Prognosis. All this of course is relative to the [illegible] and complications of the disease in [illegible] and simple form [illegible] [illegible]

has not existed for any [illegible] length of time it is generally of no always a mere ady that adheres of a fixed and run out but when the attached virus conjunctive and suffered to run its course for a long time it is not so favorable: And without strict observance to both Medicinal and hygienic treatment recovery does not take place

Treatment It is necessary in the first place to remove the agents that give rise to the disease, or the causes, which as we have noticed in enumerating them, are more than [illegible]

[illegible] in the [illegible] a [illegible] find [illegible]

If we discover that [illegible] it is [illegible] ication is the foundation of the disease

There can be no better commencement of relief for the patient than to forwarn him of his evil habit and [illegible] shortcoming the necessity of [illegible] the food by due Mastication for a proper ingress into the the Stomach. If in searching for the cause we should discover it to be food taken in excess, overtoping the powers of the Stomach; it is quite as desirable as in the preceding case that means should be taking for the removal of such exciting agents, by allowing the [illegible] to be taking into the Stomach; When we find the cause to be [illegible] [illegible] [illegible]

it will be necessary to control the patient in this indulgence but an entire abstinence should not be brought about in this way for as the stomach has accustomed itself to stimulants or assistance in the performance of its offices a speedy withdrawal of this aid would produce the most distressing

Experience has proven to us that a moderate quantity of liquids at meals are less official - at least harmless since the little is in dation it in so large quantities which dilutes the gastric juice. and in which state it is unfavorable for digestion

I have in this home as in other in administering to their thirst - for it is often a [illegible] [illegible] [illegible] real desire for liquids but a time an

uneasy sensation within the stomach, a gratification of which is only momentary relief, with the prospect of aggravating the complained sensation. If any [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] will be proper to remedy this by abstaining from mental exercise untill the tone of the stomach is gained. The kind of wine best suited for a Dyspeptic is relative; for one that could not be supplied without difficulty by some in a [illegible] might come to taken by some without detriment labouring under dyspepsia. However we will consider some of the articles that should be [illegible] in most cases, and are those that are commonly admissable

The articles that come under the
former class are those that require the
longest time for digestion. Meats that
are either tough smoked salted or fat
[illegible]
[illegible]
difficult of digestion. Pork is considered
objectionable. All heavy doughy [illegible]
such as [illegible] [illegible] [illegible] and
[illegible] [illegible] [illegible] [illegible]
[illegible] by the gastric juice. Of the
latter class of articles we may mention
in the Animal Kind Venison under
Mutton and Beef. Among the poultry
[illegible] chickens and turkey which should
not be [illegible] [illegible] [illegible]
should be light and [illegible]. Bacon and

as you [illegible] of the [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
potatoes that are dry and mealy tomatoes
peaches and blackberries are generally harmless;
high seasoning of food should be avoided

Meals should be taken at regular in-
tervals which should not be of too great
length [illegible] [illegible] [illegible] [illegible]
vals of about six hours is perhaps what
nature requires Exercise is very conducive
to easy digestive

[illegible]

That is first duties to relieve urgent sym-
[illegible] and secondly to assist nature
in her office [illegible] inflammation should
be a contraindication [illegible] [illegible] [illegible]
a moderately leaches applied to the Epigastrium

will generally succeed if not prevent breaking
together with purgatives, and low diet.
To remedy obstinate costiveness injections
will be useful of a mild character water
with the addition of soap and oil; persistent
costiveness may require a gentle laxative
a bitter powder or a pill composed of
such drugs as will act gently on the
Nux vomica in from the twenty fourth to the
twelfth of a grain; may compose a pill
of this kind; it should be taken a little
after meals [illegible]
of the stomach without inflammation
[illegible] prussic acid is perhaps the
best remedy given in doses commencing
with one and increasing if necessary to [illegible]
or four minims [illegible]

sedated by Stramonium opium or Hyoscyamus
Nitrate of bismuth when there is
faintness and sickness of the stomach is a
remedy of much value, it may be given
in doses of five grains five times a day
with water syrup if not well borne in
the form it may be combined with gum
acacia taking in a little water, Apothecaries should of it prepare chalk
may be used; when there is much acidity
present the antacids should be had recourse
to magnesia; the carbonate when the laxative
is not required the [illegible]
most agreable; when tonics are required citrate gentian
or quassia if anemia is present the preparation
[illegible]
[illegible] as sound knowledge should direct

An Inaugural

Dissertation on

Natural Labor

Submitted To The

Examination of The

Trust. Regents and Faculty

of Physic

in The

University of Maryland

For The Degree of

Doctor of Medicine

By Charles Carroll Jr

Baltimore Maryland

[illegible]

[illegible] Author [illegible]

[illegible] the great majority of cases [illegible]

[illegible] as the duty of a [illegible]

[illegible] acquainted with the [illegible]

[illegible] Saloon is divided into two classes

[illegible] of the [illegible] and its [illegible]

[illegible]

which takes place in

[illegible]

[illegible] labour, [illegible]

[illegible] Thomas, Jakes [illegible] have in

in which he [illegible]

[illegible]

it accomplished, in a reasonable

[illegible] time, with a [illegible]

[illegible] the [illegible]

classes, [illegible]

[illegible]

the last month [illegible]

[illegible]

seaside, [illegible] the grounds, which

has caused the [illegible]

cultivated, [illegible] [illegible]

in the [illegible]

calls to mind, and

mechanical imitation

[illegible]. Succeeding

the vagina

[illegible]

[illegible] is general

color, but as time advances,

and the [illegible]

the parts, and indicate

left-hand. E

first stage common

with the dilatation in front

dilatation

the os uteri to the passage of the child through the vagina. In this sense, from the expulsion of the child, to the expulsion of the placenta and its membranes. The true pains, may be distinguished from the false or spurious pains, by their occurring regularly: they are first felt in the back, and the lower part of the uterus, extending gradually around to the front. On the other hand, the false pains occur irregularly, and in the fundus of the uterus, they are of limited extent, and are not accompanied by

The nervous disorder from the vagina. The true pains occur at regular intervals, increasing gradually, ~~at~~ ~~ex~~ in frequency and power, until they arrive at their maximum, with slight intermission, until labour is accomplished. The pains are of two kinds, and exhibiting different characteristics; 1st the cutting or Grinding pain, second in bearing down pains. The cutting or grinding pains are pain peculiar of the first stage of labour, or dilatation of the os uteri; they are short, severe,

Pains are not very frequent, but rather indicate the errors, from some pain; they are generally seated in the back, and around the loins and thighs, and are good diagnostic signs, under which, we are able to acquaint ourselves with the first stage of labour. As the head passes through the os uteri, sometimes rigors, as a prelude to a strong pain which is not the effect of cold, the pulse remains the same, and is not quickened, until the second stage comes on. An examination will now reveal the state

[illegible] beginning is cool and moist, and is of the natural caliber, and as labour advances, the heat of the vagina is increased, and the parts become relaxed and [illegible] is increased by repeated pains. The os uteri, which, is in the [illegible] is now dilated sufficient, to allow both the head and body of the child to pass through it. The [illegible] are [illegible] [illegible]

The first stage of labour is an [illegible]. The [illegible] of the second stage, is [illegible] in the [illegible] the pulse, which in the first stage was natural, now becomes more frequent, the pains [illegible] are short, sharp and frequent, are now quickened, as well as increased in strength and power, and there is hardly an intermission between the pains. These are called bearing down, or expulsive pains, and are indicative of [illegible]. The countenance is flushed with a fixed view, and

consequently, when a [illegible] supply of air to the lungs, from the bearing down and contraction of the diaphragm; vomiting sometimes takes place about this time, and is beneficial, as it tends to relax the soft parts. If with the vomiting, there is a rapid pulse, a furred tongue, [illegible] mated skin, accompanied with headache, watchfulness & agitation, [illegible] first cases, as the head advances, the bones of the head [illegible] sometimes caused cramps, &c

[illegible], pain may be relieved by friction of the [illegible]. The head is now [illegible] down [illegible] of the [illegible], and the [illegible] ing, but the descent is greater than the [illegible], to aid in [illegible] of nature for the protection of the Human family. The head is now distending the vagina, and the pains are at their maximum [illegible], each pain [illegible] in length to gain on the preceeding one, thus distending gradually the perineum, and the os externum is thus [illegible], for the

extreme dilatation; the pains [illegible] succession, as to be called double pains, a pain coming on, before the preceding one has ceased. At length all resistence is overcome, with a cry of pain, from the mother, the head is expelled; a [illegible] is born of one or two pains, the rest of the body is expelled, and the second stage of labour is completed. The patient [illegible] suffering, will now tell you, that she enjoys

[illegible] the case, [illegible] of the hand is placed over the abdomen, the uterus will [illegible] large and [illegible] contracted. The third stage includes the expulsion of the placenta, which will be spoken of in another place.

Duties of a Physician.

When a physician is called to a case of labour, he should provide himself with his pocket-case, and a pair of scissors, and some ligatures. On his arrival, the nurse will inform the patient of his reception, while he

remains down stairs, or in an
adjoining room. The midwife then visits
the patient, and ascertains
whether she is in labour or
not, and whether she has
pains, and also whether they are
true or false. The discharge
from the vagina must also
be ascertained, and also
the quantity and quality.
The necessity of an examination,
will also be required.
If he thinks the pains are
true ones. If necessary
to make his examination,
he should procure the
[illegible]

or sweet oil, and after leaving the room for a few moments; to allow the patient to be fixed in bed, and on her left side, with her knees drawn up; and after he has anointed his hand with a little cerate, he should introduce his hand under the bed clothes, and the finger, guided along the perineum, until it enters the vagina, and is to be directed upwards and backwards until it touches the protuberance of the os uteri, or the projecting part. [illegible]

vagina and as much will be ascertained, the dilatability of the os Tincea will also be ascertained, the os tinca will be felt, and if there is any difficulty, the membranes may be felt at each pain protruding the os. The head of the foetus may be felt through the membranes (if they are not ruptured) the fontanelles are to be felt for, and by this means, the presentation may be ascertained. If the head presents in the natural position, and labour is progressing it is not necessary for the physician to remain in the

room all the time, neither is it necessary for the patient to keep her bed: the patient should be allowed her ordinary quantity of food, and have her bowels evacuated, by means of castor oil or Enema. The bladder, should also be emptied and the dribbling of the liquor amnii, should not be mistaken for the urine. The patient should not be allowed to make voluntary efforts during the first stage, as no effort, on her part during this stage, will hasten her delivery. Towards the end of the first stage the nurse should

make the bed, and dress the patient, or prepare her for delivery. This is done, by placing a piece of oiled silk upon the mattress, immediately under where the patients hips are to rest, over this, the blankets and sheets should be put; and then the sheets folded square, should over this be put, to absorb the discharge from the uterus. These may be easily removed, after labour is accomplished. The oiled silk should remain in its place. About the commencement of the second stage the patient should undergo

in bed, and the most proper for a patient to be placed, is on her left side, with her hips drawn up, and her knees near the edge of the bed. although it is necessary for her to take her bed, but not necessary for her to keep one position until the head presses on the Perineum. The flannels night and under coats, should be drawn up above her hips, to prevent being soiled. The membranes are ruptured about this time, and if they are not, and by examination we know that the head has passed the os uteri, we may

replace them with the finger; the head will now be felt low down in the vigina, and the accoucher should take his place by the bed side, and be ready at the proper time, to support the perineum, which is down for two purposes, first; to impart force enough externally to support or contract the perineum from within, and secondly, to give the head the proper direction, and to prolong the curve of the sacrum, so that the head may be carried through the orifice of the vigina and not through the perineum.

Pressure on the perineum should be made by means of the hand, commencing at the coccyx, and reaching to the anterior part of the perineum. The right hand is the most convenient, allowing the left hand to support the head, and carry it in the proper direction. Very slight pressure, on the anterior portion of the perineum is required, but that on the posterior should be firm. After the delivery of the child, the first thing to be done, is to remove any mucous with the finger, which might have accumulated in

the childs mouth. The hand should then be placed on the uterus, and if there is not another child, the uterus, will be felt in the abdomen, greatly diminished in its size. The child, if it is healthy, and has not suffered from pressure, will cry as soon as it is born. As soon as respiration is fully established, and the pulsation in the cord has ceased the umbilical cord should be tied about two inches from the abdomen and should be divided by a pair of sharp scissors.

The child is now ready for the nurse to be washed and dressed. But before washing it, the nurse should anoint it with a little lard, all over and then wipe it with a soft towel, to remove the cheesy matter, with which the child is sometimes covered. After the child is washed and wiped dry, the navel cord should be dressed, and a small bandage or binder applied around its body; the patient in the mean time, has had a short respite, but soon the pain comes on again, to inform the nurse. Very often

it is expelled from the uterus, and remains in the vagina, and gentle traction on the cord, will, if properly applied, bring it away, no force is to be used, but gentle traction should be made, downward and backward, in the direction of the upper strait. After the expulsion of the placenta, a warm napkin, should be applied to the parts, and the soiled sheets, may be removed from under the patient, and her dress drawn down, but before doing this, the binder should be applied, and a pad

led nearly over the abdomen, as it affords a great deal of rest to the patient. The physician should enquire, if there is any more discharge than is usual, if not, he will not leave the house, under an hour after the delivery, for fear of hemorrhage. The patient should be kept perfectly quiet, in the recumbent posture, and not allowed to raise herself in bed, under any condition, as fatal results have taken place from want of these precautions. The diet is to be kept on a very moderate diet, and to avoid constipating

articles of all kinds, and especially cinnamon. The child may be given a little sweetened water or molasses, but it is not necessary to give it any thing: it should be put to the breast as soon as the mother has any milk. I have thus far, attempted to give the course of a case of natural labor, with its accompanying symptoms, also the duty and conduct of a Physician at the bed side.

Respectfully yours

Chas Lamb Jr

An

Inaugural Dissertation

on

The Causes of disease

Submitted to the Examination

of the

Provost, Regents & Faculty of Physic.

of the

University of Maryland

For the

Degree of Doctor of Medicine

by

W. G. Weems

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Wherever man exists we find him surrounded by those circumstances which are capable of disordering his functions. The sources of these various influences are as numerous as their effects. The elements which surround us and which form the medium by which we are connected with both the organic and inorganic world of matter - often contain the subtle elements of disease. Unsuspected poison lurks in our every food and drink. Our passions even some of our better impulses when too violently exercised, become possessed of instruments wherewith to scourge us. Indeed whatever renders life agreeable, whatever ministers to health and happiness may under changing circumstances develop disease with all its melancholy

accompaniments. And since the human system is continually under the influence of causes, which tends to interrupt its actions. Life would be but short in its duration, and wearied by constant disease, if the animal structure were not endued with the inherent power of resisting to a degree the influence of injurious causes.

It is by the aid of this vital resistance, that man is enabled to live through a long series of years amidst a multiplicity of circumstances, which conspire unceasingly to destroy him. In relation to the degree in which this power of resisting injurious impressions is possessed by different individuals, there exists great diversity. And hence the various degrees of

constitutional predisposition to disease which obtains among different individuals. Of several persons who are exposed to some one of the known exciting causes of disease to the influence of a cold and damp atmosphere for example - some will suffer the usual consequences of such exposure - while others will escape without being in any way affected. It is not the cold alone that causes them to suffer - much depends upon the condition of the system, when subjected to its influence, whether or not it contains vital resistance enough to enable it to contend successfully against the injurious impression. This conservative force stands a watchful sentinel guarding

the human system against the noxious agents to which it is constantly and necessarily exposed. The existence of this power to depose and to expel extraneous agents when introduced into the system has been long recognised and acknowledged by pathologists. Its operation is seen only in its effects. An irritating substance is applied to the delicate and sensitive Conjunctiva. The irritation induces a profuse secretion of tears by which the offending body is removed.

A foreign body is introduced beneath the skin. inflammation rapidly supervenes. lymp is effused. and finally — suppuration throws it off. This though it involves a more Complicated series

of phenomena is a no less perfect, and beautiful illustration, of the means employed by nature for getting rid of irritating substances. As long as this principle remains undisturbed so long we walk with comparative security though the seeds of our destruction, beset us on every side. But when from any cause it becomes weakened or lost — we find ourselves unusually susceptible to very slight influence. Such a condition of the system is generally denominated a predisposition, and its cause is called a predisposing cause of disease. Then on the other hand those which are capable per se of producing disease independently of any predisposing cause are called exciting causes. Yet although in most

cases the distinctions between these two sets of causes is evident enough - yet there are cases in which the conditions relating to its ~~their~~ mode of application being changed the same cause will at one time seem to act as a predisposing - while at another as an exciting cause. Let us take for illustration that familiar example the influence of cold. Applied under ordinary circumstances cold induces some inflammatory or acute disorder - thus acting as an exciting cause while on the other hand if low intense in degree or if its action be continued for a long time - it lowers the vital forces by its sedative effect - thus acting as a predisposing cause. This apparent difference in their action which we have seen to be

dependent upon the circumstances of their application has no doubt given rise to much dispute concerning the classification of many of the known causes of disease. Upon this disputed ground I do not feel any inclination to enter, but will leave its discussion, and proper investigation, to those whom more extended experience has rendered equal to the task. Considering two things as being necessary to produce disease. A cause which acts upon an organ - and a disposition in the organ to be acted upon. I shall proceed at once to the consideration of some of the most prominent causes of disease. The element to which man is chiefly exposed is the air - in it he lives moves and has his being - from its chemical influence he cannot if he would escape - Neither can he free himself from its varied mechanical changes

Its variable temperature produce very decide effects upon the respiratory organs giving rise to catarrh and its kindred affections. And since the quality of the blood depends very much upon its due aeration by these organs - we can easily conceive how disease of the lungs may give rise to irregular or disorder action in almost every part of the system. The changing seasons impress certain peculiarities upon the system which render it liable to be affected in various ways. The cold weather of winter and early spring predispose to pulmonary disorders. While autumn develops serous diarrhea dysentery and other affections of the alimentary canal. The former of these effects is supposed to result from some impression made upon the nerves of the part. While the latter has been attributed to sudden

cooling of the surface, which takes place during the season when these diseases are most prevalent, on account of sudden vicissitudes. The temperature being very high at midday - but lowering rapidly as evening approaches. Besides these obvious effects there exists certain properties in the air yet unknown save in their destructive effects which are largely concerned in the production of disease. Such is the miasmatic effluvia abounding in certain paludal districts of the world. Concerning the essential nature and character of which our external senses give no information. Chemistry which has within the last few years unfolded to our vision so many hidden mysteries connected with the science of medicine has been baffled

in her attempts to separate it, notwithstanding she has consulted her sources in rigid but unfruitful analyses. That such poison does exist is proved incontestably by the fact that a night spent upon certain portions of the coast of Africa or a journey through the Pontine Marshes in the vicinity of Rome after dark is almost certain death to the stranger. Apart from these alkalines and properties which are natural to it the air often contains impurities which are incompatible with health. The powerful influence over the human system arising from this source is clearly seen when we contrast, the florid hue of the countenance - the vigorous and manly frame of the Countryman, with the slender

and susceptible constitution incident upon a residence in a large and populous city. No doubt, much of this difference is to be attributed to the irregular and inactive life of the latter, as compared with the more regular habits and heavy exercise of the former. Yet numerous and well ascertained facts attest that this is not all. Children for instance reared in large cities get as much exercise as those of the same age living in the country, yet the comparative mortality during infantile life is much greater in town. Much therefore must depend upon a vitiated atmosphere. Patients suffering from acute disease, being debilitated by confinement in a city, are speedily restored to health upon removal to the salubrious air of the country. Chronic

maladies also manifest a tendency to improve under this plan of treatment. Even although they are incurable in their nature, the invigorating atmosphere of the Country or the Sea Shore acts very beneficially by so building up the system, as to enable it to withstand the ravages of disease. Many of the occupations of man are carried on in small and ill-ventilated apartments where many individuals are crowded together. The noxious influence of this agent is under no circumstances better exemplified. It is a condition highly favorable to the development of scrofula the slightest germs of which it fosters and encourages. In this place would be properly come epidemic causes. The diseases resulting from these influences resemble in a marked degree what are called endemic diseases; in their affecting

many individuals, in the same place, and at the same time differing however from that class in the circumstance that they do not manifest the same tendency to regular recurrence at fixed intervals; Neither do they confine their ravages to particular localities. But they often sweep over a whole country, carrying death, and desolation in their pathway; then disappearing, probably not to return for many years. Apparent epidemics occasionally arise from common causes, operating extensively, or with unusual violence, upon a whole community: Thus Cold may produce an epidemic characterized by pulmonary irritation. Heat may develope an epidemic of diarrhea. Food of improper quality will give rise to epidemics of scurvy and dysentery; but the evil effects can be traced to a known cause. But there are epidemic diseases; which originate, and pass through a country, whose cause or causes

cannot be accounted for — and concerning the essential nature of which we are as yet completely in the dark. Many conjectures have been advanced concerning their character and nature; and some very plausible ones — but their authors have not been able to support them substantially. Many of them have therefore fallen into disrepute and given place successively to other doctrines and theories upon the subject. The one which is now generally received is that they depend upon something in the air which exerts a deleterious influence. But no human ingenuity has yet detected in what that atmospheric peculiarity consists. The most perfect illustrations of this class of diseases with which we are familiar are Influenza and Cholera. A few words respecting the history of which may not be out of place. Though arising at different periods: they had a common origin

in the east. Their Geographical route over the world differed very little. In their effects however they differed widely. The Influenza affecting nearly every individual in a community but seldom causing a fatal issue; while the Cholera though by no means so universal in its effects was dreadfully fatal to all whom it attacked. Emerging from the marshy deltas of the Nile and Ganges where it committed dreadful slaughter among the armies of those regions. In 1817 it spread with fearful rapidity through Russia. Entered the dominions of the Czar where among the ice and snow of a Russian winter it raged with irresistable violence from thence it passed through Poland into Germany committing in its course the most frightful ravages Lingering for a few years in its course; it next attacked Great Britain

though it dealt more kindly with her, than most other Countries through which it passed. Not regarding that immense barrier of nature the Atlantic ocean from England like the star of Empire it westward took its way; visiting the United States with unusual severity; ravaging France and Spain; it rested at last upon the sunny plains of Italy and northern Africa. Thus like "the pestilence that walketh in darkness, and the destruction that wasteth at noonday," it rapidly warred the Civilized world, carrying death and destruction into every Condition of Society. The King and the Subject - the master and the slave - youth, manhood and old age; all felt its direful influence; all were overwhelmed among its victims. No, Italian clime escaped its vengeance. The snow clad hills of Switzerland felt its burning sway of Africa alike felt its mighty power.

Another very prolific source of disease is the possession of a mind; that great gift by which man is elevated in the scale of existence far above the brute creation. Through the influence which it exerts over the body it occasionally produces considerable inconvenience. Very many diseases have a purely mental origin; excessive intellectual toil; the frequent occurrence of those powerful impressions of which the mind is susceptible is soon followed by impairment of the bodily health and strength. Among these impressions the excitement of the passions holds a conspicuous place. It is related of the celebrated John Hunter one of the most distinguished Physiologists and Pathologists that has ever graced the profession of Medicine in any age or country; that for every paroxism of anger in which he indulged

he paid the tribute of an attack of Angina Pectoris; his last and fatal attack is said to have been occasioned by his giving way to impulsive feeling when his work was disputed by one of his Colleagues before the board of directors of St George's Hospital to which he was attached for many years. Alas for humanity and for science that such a man should have fallen under such circumstances; and in the very place from which he no doubt emanated many of those doctrines and theories which to this day charm and influence an enlightened profession. Long continued anxiety and distress by consuming the nervous energy strip the Physical part of the system of much of its powers: thus rendering the constitution liable to be affected by disease

when its exciting causes are present. There is no circumstance more apt to produce such a condition than depression of spirits. Many are the instances in which numbers as well as individuals have escaped a prevailing epidemic until depressed by some unfortunate circumstance occurring; and then they have at once been numbered among its victims. History records many marked examples of this truth. Advancing armies flushed with victory; have been known to undergo hardships and exposure with perfect impunity. But as soon as they were defeated in battle or suddenly foiled in their enterprise disease has marked their retreating footsteps with not only apparent but frightful ravages. Another common predisposing cause of disease is produced by the existence in some organ or system

of the body; of the consequences of previous disease. This cause may act in two ways - either by debilitating the general system - or by causing changes in the function or structure of the part. Under the first head may be ranked those which in themselves depress the vital forces; such as low grades of fever - and those maladies which require for their removal such depletion measures as are calculated to reduce very much the tone and energy of the system; such are Pleurisy, Pneumonia, and the inflammatory affections generally. Under the second division may very properly come those constitutional diseases the sequela of which cause such irritation in important parts, as to give rise to other affections such are organic disease of the heart and tubercular deposits

The abuse of alcoholic Stimulants comprehends one of the most extensive and important sources of disease known to our art. Extensive because their injurious effects are so widely diffused among men. Important because the diseases which they excite are many and of the most serious character. The portions of the body upon which their deleterious influence is chiefly exerted are the nervous and vascular systems. In large quantities they act as narcotics upon the brain; which is primarily affected. The spinal chord next feels the impression; its functions are imperfectly performed and hence arise those frequent congestions; which we observe following their habitual use; resulting at length in Paralysis and dropsy. Disorders of the

stomach and digestive organs can in many instances be traced to their direct influence. Nor is this to be wondered at when we reflect that a great Physical law requires excitement to be followed by corresponding depression. In accordance with this law, it follows that the stomach by long continued irritation and stimulation of blood kept up in its vessels is weakened in its functions. And hence the loss of apetite, and enfeebled digestion which supervenes. Both functional and organic lesions are induced in other abdominal organs also by the abuse of these stimulants. The stimulus being absorbed into the circulation is carried rapidly through the portal vein to the

liver; upon which organ it acts with fearful energy - causing sooner or later a fatty or cirrhosed condition of it. But the evil consequences of such a condition do not stop here. But they may be traced through the obstruction which is induced to dropsy; which tends slowly it may be but surely, to a fatal issue. Upon the kidneys which are the natural channels by which these foreign substances are eliminated from the system; their action is especially hurtful. Their secreting powers are diminished and their structure altered in consequence of the excessive excitement to which they are subjected. Long continued irritation of these organs is supposed to predispose them to that

very formidable and intractable disorder known as Bright's disease - characterized by albuminous urine. Considerable obscurity however yet overhangs the intimate Pathology of this disorder. But the time we trust is not far distant when the darkness which now envelopes it shall be dispelled by the sunlight of science; and when some means shall be discovered to alleviate the suffering with which this disease is daily afflicting humanity. Much more might be said upon this highly important subject; many are the interesting inquiries which its consideration suggests. But time will not allow of their investigation. Here I must stop. I know full well that the sketch I have given of this great and difficult subject is a very imperfect one. But how could it be otherwise, when the limited

experience and slender ability of the writer is taken into account. If I have rendered myself intelligible; if I have given such an account as shall serve to accomplish the end for which it is designed; I have performed my task. Hoping that it will be as acceptable to you as it is unsatisfactory to me. I respectfully submit it for your consideration

An

Inaugural Dissertation on
Clinical cases of Dropsy
Submitted to the examination

of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

March 1852 [illegible]

Cirrhosis: Cause, Pathology, Symptoms, Diagnosis of Liver and of Spleen

[illegible] in [illegible] and [illegible] with [illegible]. The patient states that [illegible] fever [illegible] in his neighborhood, and that he has been the subject of fever all his life, [illegible] relapsing. The use of Quinine etc. has [illegible] prevented a [illegible] without being affected. He [illegible] absolute intoxication. He took a severe cold last spring, and had fever; [illegible] the receding [illegible] of the abdomen was perceived. This increased [illegible] rapidly, no urine was voided, and an increasing [illegible] suffering ensued.

He finally had the abdomen so enormously distended as to project upwards to an excessive height; he could perceive the impulse of the heart several inches above its normal location. The diaphragm and the whole contents of the chest are pressed upon, while the ensiform cartilage assumes a right angle with the rest of the sternum. Dullness very decided. On percussion a considerable tumor was found in a rare position, that can [illegible]

the veins have from many, may, that they have floated as high as they could without reaching the surface of the fluid. Why? for the distension is so great that the mesentery is not found enough to allow the intestines to reach the surface when the patient is supine.

He would have inferred much further complication as yellow and the appearance is that of bile, bile and inoculation. Considering the enormous distension, there is less dyspnoea than might be supposed.

Here there is some impediment to the venous circulation of the abdomen whereabouts, and of what kind is it? Is it hepatic disease? If so, it is here a matter of inference only, for the liver cannot be felt on account of the great distension and the tense condition of the muscles and ligaments over them. This inference might be strengthened by the patient's habitual intemperance. But the disease here is evidently produced by malarious fever. It is well known that Cirrhosis effectuates to malaria and the consequences of such as diseases of the abdominal viscera. The fever

unnatural accumulation of blood in the abdominal viscera may be the cause. In the most characteristic condition, produced by repeated attacks of intermittent fever of malarious patient has suffered severely, consists of enlargement of the spleen. This is sometimes enormously increased in bulk, so as to be felt and seen through the integuments, which here however is impossible. The state of the spleen is very common. Now the spleen becomes particularly distended with blood, and the abdominal circulation becomes embarrassed and the abdominal veins gorged, as they must be during the cold stage of an intermittent. This distension does not forcibly subside at once. This man had frequent paroxysms of ague, may he has suffered from it all his life. It is easily understood how the spleen may become more filled with blood in this disease. The sequel of this in this case has been congestion of spleen, secondary congestion, hidden, and more serious disease of the liver and complicated by thereon ascites.

The nature of the morbid changes afford a reason for the intractable character of this case and of Ascites in general. Here we find the superficial veins, before invisible, become numerous, large, anastomosing over the abdomen showing that the obstructed blood was indeed now channels, but that the compensation they furnished was not sufficient

Our object here was to evacuate the fluid. Hydragogue purgatives were employed to which Calomel was added. Ordered Calomel & Jalap aa grs x; if no operation follows gt Croton Oil or 1/2 oz Castor-oil. Opts to be repeated at night to procure sleep. A continued drain was kept up by means of Diuretics and purgatives to no purpose for two weeks. The enormous distension remains the same while the distress arising therefrom becomes urgent and extreme. To afford temporary relief to the patient, paracentesis was performed. Ten gallons of water were drawn with immediate relief of symptoms. He is now taking Squill

Digitalis and Calomel in grs. [illegible] every day, and one gr. Opium at night to procure sleep.

We had not, in ordering applications, to complate a cure, but simply a temporary relief from distress. Experience teaches us to expect few recoveries. Gradually the lymph in the secre- mulates after with more rapidity than before, and again the operation has to be repeated. We expect, that this will be the case of this patient. If so, his strength will rapidly deteriorate and he will die.

Opthly. Results of Inoculation

Joseph Brown, a healthy boy of three months near Delaware Iowa was inoculated with lymph from the arm of the four weeks old. The father gave the following account of them. The boy was in his usual health. Thinks he appeared good health, but was attacked four weeks since by frequent paroxysms of Intermittent fever of a violent type, the progress of which Febrine typhoidy was superadded

He was called on medical advice but on convalescence found him essentially well with a swollen belly.

The boy is very pale, lips, tongue and face are almost white. Pulse irregular, constant nausea, frequent retching, coldness of extremities, restlessness and tossing of limbs at night as well as palpitations of heart and breath. On applying the stethoscope on scalp, pulsating sounds are heard. The jugular veins were found pulsating and distended. The abdomen is slightly enlarged by ascites, fluctuation can be distinctly felt.

The urine was tested and no albumen found. No pain in region of kidneys or head symptoms, neither was uneasiness in the region of the stomach and liver complained of. After the most careful examination no bellows murmur was perceived, although there is slight increased dullness of praecordial region, owing probably to relaxed state of heart. Cough, dull white countenance, sense of oppression of breath on

catch in the breathing, inability to lie on the left side, pain in heart increased by full inspiration, stiffness and pain in neck about the left shoulder, fever, intermittent pulse, frightful dreams, blackness of countenance, tendency to drowsiness and delirium; all the historic signs of disease of the heart were absent. Auscultation and percussion proved the chest to be in a normal condition, yet the jugular veins stood out in bold relief from neck, and exhibited a vermicular pulsation.

Regurgitation of part of the blood when the ventricle contracted certainly took place. Compensatory dilatation, preventing the easy passage of the blood out of the right ventricle is present, which is often ultimately attended with dilatation of right auricle and jugular veins, but as the patient previously had a severe intermittent fever aggravated by Bilious Dysentery and presenting also the symptoms of confirmed Cachexia, I am inclined to think that the regurgitation which is the direct

must result from a bad condition of the blood. Anæmia produces weak and flabby muscles, and it is reasonable to presume that the involuntary muscle, the heart partakes of the general debility of the muscular system and becomes incapable of sending the blood forward with the requisite energy. It consequently yields and dilates under the resisting pressure of the blood, but unless the due relation between the cavity and its orifice is destroyed. The tricuspid valve performs its office as yet, but the orifice is larger you must of course now have regurgitation. The blood returning from the ascending vena cava meets with regurgitating stream, is delayed, the liver becomes congested, a consequent pressure on the portal vessels takes place; the thin part of the blood escapes, and thus you have Dropsy.

The chance therefore of the complete and ultimate recovery is reasonably good and this is to be effected by the administration of Iron, good healthy food, the bowels are to be

with open exercise and fresh air. Under this treatment he will recover. As the strength will return to his lips and cheeks and the debility will vanish. On restoration of the muscular system in general recovers fresh tone and vigour, so the heart also regains the degree of power necessary for the proper discharge of its functions.

He was put on the gr 3 doses of Carbonate of Iron, also a double one from sweat opts of nitre. The treatment was continued slightly changed by the substitution of 15 drops of Liquor of Iodide of Iron in place of the Carbonate of Iron, until the 17th of October when the debility was found to have lessened the cough was trifling, resonant and vesicular respiration, the colour of lips and cheeks less pale. The treatment was ordered to be continued. The little patient left on the 29th of October — relieved and cured from all abnormal symptoms.

Anasarca cause Heart disease

[illegible] a [illegible] years of age [illegible] and admitted last May from sick [illegible] — [illegible] has no [illegible]. [illegible] hitherto a temperate man. Has handled with a [illegible] effect of inflammatory rheumatism [illegible] the effects however [illegible] and scanning trouble. Previous to his [illegible] in consequence of exposure in a storm he was taken with a chill, and presents the following symptoms on admission.

Frequent pulsations, [illegible] of [illegible] brown, a catch in the breathing, dry cough, inability to lie on the left side. Whenever he makes a full inspiration the pain in heart increased. He complained on corresponding ribs he [illegible] stiffness and pain in and about the left shoulder, which sometimes extended even to the elbow. Urine dry, bowels confined, urine scanty, pulse [illegible] and intermittent, countenance anxious. His ankles thighs feet, scrotum and [illegible]

lightly: scrotum as large as a child's head, [illegible] extended and [illegible] into the urethra, assuge of urine preventing also approximation of thighs and impossibility of laying on either side

Bellows murmur was found on examination to extend along the aorta and even as high as carotids, and also at the apex of the heart; showing desease of mitral valves of left ventricles and sigmoid valves of aorta.

He was put by Dr Roby on a combination of 20 grs Squill 1 gr digitalis and 1 gr of Hyoscyamus which he continued to take with more or less urine evacuations and discharge of urine until three weeks after admission the dropsy subsided with great abatement of symptoms. However it gradually returned again beginning with swelling of feet and ankles, which subsided at night but to return again in the morning until an extraordinary ascites and anasarca was produced. Shortness of breath palpitation of heart a sense of suffocation when attempting to lay down [illegible]

severe. Tightness across epigastrium augmented by food and drink, weight and stiffness of limbs, a great drowsiness, distention of the jugular veins, unnatural impulse, irregular intermittent weak pulse; all these were present.

The urine was not tested but no albumen found. The kidneys being presumptively sound again scruples were given in infusion of Bitartrate of Potassa 1 to one pint of water to be drank ad libitum, also an Infusion of 1 to 1 pint of Juniper Berries added to the above, under which treatment he remained during the latter part of August and middle of September, when I then took him under my care.

He was again examined and Bellows murmur found of the mitral valve, and also of the sigmoid valve of the aorta. The patient having had Rheumatism, having enlarged distended jugulars, bellows sounds, unnatural impulse and irregular movements of heart and increased dullness of precordial region and

no albumen having been found in the urine, nor severe head symptoms having occurred, shows the presence of urea in the circulation. The dropsy here has occurred by a certain logical, or mechanical obstruction to the passage of venous blood. Regurgitation takes place from mitral valves, the left auricle and pulmonary veins become distended, the blood is detained in the lungs, then commences dyspnoea, at first occasional only when the heart conveys a greater quantity of blood than usual, as in exercise or emotions, anything that diminishes the capacity of the chest, as a full meal by flatulent distention of the stomach and intestines and by recumbent posture. The lungs may however relieve themselves for a considerable time by the increased secretions of the bronchial mucous membrane. Dyspnoea even when habitual, may for a long time precede dropsy, at last the right ventricle unable daily to propel its contents into pulmonary vessels, morbidly full, becomes distended, not from necessity

then permanently; then, with dilatation and with that dilatation, we have a broad venous system of which we see a part in the ~~[illegible]~~ [illegible] veins of the neck. This man had irregularity of pulse, preternatural impulse of heart, occasional shortness of breath, large deposition of fat, with, middle or lower part of lungs, more or less expectoration tinged sometimes loaded with blood. Eventually his ankles began to swell, then by degrees he became universally dropsical. After dropsy had become established, a heave impulse of heart by no pericardial limits, pulsation felt was irregular, a liability to fluttering palpitations, to extreme panting dyspnoea on the slightest exertion, even on taking food in the sitting or recumbent posture.

As the kidneys became sound he became not being albuminuric, he was put on diuretics & Cathartics Kept [illegible] digitalis and gas Squill making 5 pills, one every four hours. He was ordered an infusion of [illegible] and Bicarbonate of Potassa, but [illegible]

a week alkaline secretions and urine became plentiful. The belly less turned, less cough dyspnoea and enjoyment of sleep

Sept 22. Symptoms as usual. Anasarca increased if anything. As mouth and gums are sore, Blue mass and Squill to be discontinued and 3 gss Inf. of Digitalis to be taken in place of it.

Sept 25 Our patient to day feels very weak, cough increasing, conjunctiva yellowish and sclerotic. In recumbent position last night, but not very severe. Ordered 9 grs Blue Mass and 1 gr Squill in pill 2 times a day and Inf of Digitalis

Sept 26. Bowels have not moved notwithstanding influence of cathartics yesterday & to day, urine very red, swelling increasing; therefore water to be evacuated by acupuncture. Pulse is very weak, Inf of Digitalis to be stopped.

Sept 29 Symptoms worse passed all last night in kneeling position, troubled by horrible dreams and quiet delirium. Pulse very weak & frequent now accompanied by great tremor. Gently expired

Oct 1. Patient died by Apnoea and Asthenia

General Dropsy. [illegible]
and Bright's desease [illegible]

Caspar Bolzel, 35 years, of [illegible]
gust 1st, sick two years. Originally caught cold [illegible]
[illegible]
breath, he also [illegible]
During the [illegible]
where he remained [illegible]
returned home shortly after his departure [illegible]
[illegible]
[illegible]
and occasional vomiting. About this time a large
[illegible]
night. He continued in this state until [illegible]
1st, the time of his entrance into the house

We found the [illegible]

on expiration, and more prominent [illegible]
side; [illegible]
vocal ill defined. Percussion [illegible]
sonant with an indistinct vesicular murmur on
[illegible]
bronchophony on the upper lobe of the left lung. Signs
of [illegible] [illegible] with [illegible]
and wet sounds of [illegible] [illegible] the upper
and middle lobe of the left lung. He suffered
from habitual shortness of breath with occa-
sional paroxysms of [illegible] dyspnoea and
cough, during which he expectorated thick masses
of yellow-green sputa. These attacks of
urgent dyspnoea generally [illegible] at night
and suddenly [illegible] the patient [illegible]
sit up in order to breathe more freely. [illegible]
skin, but no fever. [illegible] frequent but
weak pulse, a blue shade of lips and extremities
[illegible] features with looseness of bowels [illegible]

During his frequent paroxysms [illegible]
Ether [illegible]

apperent. Nevertheless the patient appeared to be
ed away and declined a proposal of Phthisis pulmonalis
themselves.
About this time Septr 24 were observed nightsweats
with hectic fever - occasional epistaxis. The pressure
of the enlarged mesenteric glands increased
was relieved by most copious stools. The patient recovered
on good nutritious diet, Cod liver Oil and iron
mixture, which he continued up to the 17th October.
On that date it was discovered that symptoms of the
fever-alternation had taken place. This symptom
might have been the result of the nervous irritability
arising from illness but the urine on being examined
was decidedly albuminous. Tenefore Bright's disease
is here superadded and the patient already dark
points with almost certainty to death.
Mr Christison suspects "Bright's kidney disease to be
occasioned in some instances by an inflammatory
effusion in the glomerulus of the kidney, the
engorgement of the capillaries of the kidney
is thus spoiled, its natural function

but partially performed, the purification of blood from urea fails to be accomplished. The albuminous impregnation and the other altered qualities of the urine above noted, may be explained either by the secretion power of the whole gland being impaired with, but not absolutely suspended, or that urine is completely elaborated, or by supposing that portions of the gland are diseased and portions remain healthy and effective; that the urine is formed by the healthier portions and mixes with the serum of the blood which passes in such through the diseased portions.

In this case the aqueous fluid which should escape from the surface and through the kidneys collects in the subcutaneous cellular tissue the tendency to effusion of serum through the walls of the blood vessels is probably increased not only by the sluggish movement of the blood in the veins from regressive debility of the heart and disease of lungs but also by the cause of that debility viz. thin and watery condition of the blood itself.

The effusion here has been slow therefore the dropsical parts, not or being pressed, we have found no deviations from the natural sounds of the heart, no distention of the large veins of the neck, although derangement of its natural movements, alterations in the force of its pulsations and in the space over which they can be felt or heard were present. These must be here attributed to the tumor. But we find rather a characteristic hue an evident lack of red blood in the capillaries an unhealthy transparentness.

The renal disease in this case must have [illegible] [illegible] [illegible]

be difficult to [illegible] I have prepared the patient
in a [illegible] position [illegible] the parts of
its order natural. [illegible] accommodating that
was [illegible]

The patient to day the 8th September [illegible]
when this [illegible] the nostrils was seen on the [illegible]
thanks to Gun Toddy, [illegible], discharges
of blood and a [illegible] of [illegible] were [illegible].
But again the [illegible] property, the [illegible]
legs, feet are like [illegible] columns the [illegible] and [illegible]
prevent by their distention the patient from [illegible]
[illegible]. Urgent dyspnoea [illegible] from
the horizontal position [illegible] the
pillows again Gun Toddy. Great [illegible] of nitre, [illegible]
tons of [illegible] have [illegible] for the last
month. The bowels are [illegible], the legs and thighs
scarified. While the [illegible] despite the quantity of
water [illegible] from the [illegible] [illegible]
ling large [illegible] on the right side of the [illegible]
~~[illegible]~~ mucous, dry and [illegible] [illegible] on the
left side. It is astonishing that with such a disorga-

[illegible] of the whole system. He patient [illegible] to use at intervals a comfortable comfort [illegible] impossible to do anything [illegible] relieving [illegible] symptoms. He will either die by Uræmia, Uræmia or Coma, or one and all combined.

Cirrhosis and Ascites, [illegible] Dr. [illegible] Caspar Pratt [illegible] Wassell, a [illegible] of [illegible] habits was admitted on the 5th [illegible]

About a year ago he [illegible] for [illegible] walking during the day and [illegible] but for me in the morning. He [illegible] fish. Has had cough for [illegible] years, [illegible] by spitting, with no pain [illegible] anything, but [illegible] general good health until four months ago when [illegible] the space of four days his legs were [illegible] anasarcous, and his abdomen swollen [illegible] by great pain and [illegible] pressure [illegible] and [illegible] constipated bowels and [illegible] attendance which did not relieve [illegible]

here two months after an attack of dysentery he presented the following symptoms.

Countenance pale, flushed and anxious. Complaining of incessant cough, urine scanty, pulse good, well bowels costive, appetite bad, a marasmus on both extremities, oedema on scrotum and thighs, also ascites. Belly permanently distended, yielding considerable fluctuation also pitting of integuments skin dry harsh and no heat. He was ordered a combination of Squill Calomel and Elaterium, three times a day, with an Infusion of Bicarbonate of Potassa, under which his appetite improved, bowels opened and an increased discharge of urine took place.

On the 15th of September Dr Edwardes saw him for the first time, symptoms but little altered except the swelling from scrotum had disappeared. On examination found heart dull, pulse irregular, no unusual cardiac dullness. Lungs also unaffected, neither abnormal sounds nor dullness. Tongue coated, great emaciation, shortness of breath and cough all worse [illegible]

was correspondence of skin pulsation was seen by pressure or percussion. The urine on that should be [illegible] on, neither were head symptoms present

To produce ascites in this case as no inflammation had been at work (and if there had been which according to the patient's history might have been exposed to cold: these would unadmitted be equally to the previously employed judicious remedies) there must be some impediment to the venous circulation of the abdomen. What is this impediment? Heart, lungs and kidneys have on examination been found sound. The state of the liver could not be ascertained in this instance because the serous accumulation forbade it. Knowing however that disease of the liver is most frequently connected with the [illegible] and specially a peculiar disease [illegible] or hot, cold [illegible] knowing also the relative importance of the patient's [illegible] functions — [illegible] a focus of [illegible] I argued [illegible] used as such.

It consists of chronic Bacillemia [illegible]

capsule. The capsule accompanies the portal vein, hepatic artery and biliary ducts which the hepatic vein and its branches are lodged in the substance of the gland which as such investing membranes with general thickening of the membranes must produce great pressure upon the portal veins and hence the relaxed state of the veins and produce obstruction hence with. The pressure affects also the acini of the liver which we have atrophy and shrinking of the organ in consequence.

He was ordered a low diet and an active cathartic 30 grs of compound powder of Jalap 15 grs every four hours, and in order to produce sleep 10 grs of Dover's powders. Sept 8th no passage under this but bile with 12 grs of calomel continue Dover powders. Sept 20th, feels better, increased discharge of urine, also 3 passages in 24 hrs. Continue the mixture and 1 grt digitalis, 8 pills, 1 every 4 hours with flannel roller for remedying flooding. Sept 21st a large quantity of urine passed, had 3 passages there and 1 at night. Slept well, less dyspnoea, cough.

Ordered Mercurial Ointment [illegible] Ointment [illegible] to be rubbed on the [illegible] salivation takes place or he is [illegible] relieved. Sept 26. The patient feels much better, enjoys sleep although the diuretics are not continued. The oedema is [illegible] but he passes urine freely. As pulse has become small digitalis stopped, the blue mass and squill to be continued. Sept 30. No alteration of symptoms. Ointment ordered to be rubbed over [illegible] region. [illegible] effusion [illegible] observed on the [illegible] but the effusion will return. Diuretics and [illegible] will again be tried, [illegible] the lungs and [illegible] refuse to respond to the [illegible] flatching will [illegible] the effusion after tapping frequently returns, and the patient [illegible] after the [illegible] [illegible] [illegible] death. [illegible] [illegible] [illegible] [illegible]

An
Inaugural Dissertation
On the Therapeutics of Quinine

Submitted to the Examination
of the
Provost, Regents, and Faculty of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine

By Charles Edwin S. McKee

1858

He who expects to engage in the practice of Medicine in accordance with the theories of the Allopathic system, and who thus seeks to relieve the diseases to which Mankind are heirs;— has before him an immense field in which to carry out his therapeutic researches. Not restricted to any single remedial agent, which must serve as the balm to all diseases, as are those who style themselves Hydropathists,— nor confined as are the Disciples of Thompson to the use of herbs alone; but with the products of every clime

at his disposal, with substances derived from the Animal, the Vegetable, and the Mineral kingdoms, as his agents,- he goes forth assisted by the recorded experience of those Masters in the Profession, who have for years graced the pages of Medical Literature with the results of their scientific researches. As the result of their labors, we who are now about to enter upon the duties of the Physician, have as our guide, a Pharmacopoeia re-plete with therapeutic agents of all natures, and of every

grade.

Standing among the most important of these agents, and on an equality with those ~~agents~~ preparations most valued by the Therapeutist.— Mercury, Opium, and Iron — are the preparations of Cinchona.

The trees from which the Cinchona, Peruvian, or Jesuits Bark is obtained, are found upon the sides of the Andes in South America.

For centuries, the Medicinal qualities of the Bark have been known and used in the treatment of Intermittent diseases.

Although the utility of the crude Bark has been acknowledged and appreciated, yet owing to the discovery of the mode of extracting the active curative principle of the Bark, the latter has entirely superceded the crude material. The Sulphate of Quinine — an alkaloid of the Bark — is at this time the preparation of greatest efficacy in the treatment of those diseases in which the Bark had previously been used.

As it is our purpose to speak only of the therapeutic applications of the Sulphate of Quinine

we deem it unnecessary to describe the mode of its procuration. More especially do we deem this unnecessary, for the reason that Quinine is almost the only preparation of the Bark now used, and may be considered as a sufficient representative of its virtues.

Before entering into a consideration of its remedial applications, a short notice of its physiological effects will not be out of place. Administered in doses of a grain or less, five or six times a day, Quinine produces effects

resembling those of the simple Bitters. Although at first no effects are perceptible, after a short time the digestive and nutritive functions are improved — the pulse becomes fuller and stronger, the temperature of the surface is somewhat increased, and a slight stimulant influence is exerted on all the vital functions. When given to the amount of from six to twelve grains during the day at intervals, the tendency of its action is specially on the Brain. The sensations produced when a

person is thus affected, are buzzing and ringing in the ears, partial deafness, fulness and sometimes pain in the head. The effects vary however in accordance with the susceptibility of the individual to the influence of the drug. The cerebral symptoms are increased, and a decided sedative effect is produced by the administration during the day of from twenty to sixty grains in divided doses. The pulse is diminished in frequency and force, and with the buzzing sounds there

is giddiness, together with actual deafness. If the dose be large there may be flushing of the face, headache, - occasionally epistaxis, and, though rarely, - delirium. But these symptoms of stimulation of the brain are superseded by nervous depression, manifested by diminished sight and hearing, tremors and depression of spirits, which have been compared to Delirium Tremens. The effect of large doses upon the circulation is to increase the number of pulsations for a short time,

which is owing to sympathy with the excited brain. In a very short time however the number of pulsations is reduced. The sedative influence from excessive doses may be carried so far that the pulsations at the wrist can no longer be felt. It may here be proper to refer to the question as to the direct or secondary effect of Quinine as a sedative. Although the opinion has been advanced by popular writers that the sedative effects are merely the consequents of

over stimulation; we are inclined to believe that its sedative effects are the direct result of its action on the nervous system. We are induced to adopt this view, from the opinion given by an eminent and successful Practitioner of Baltimore, who has had much experience in the use of Quinine, and in whose opinion we have full confidence. In its action on the brain its effects are perceived, not so much on the intellectual faculties, as it rarely produces delirium; but on the basilar

portions - the sensational and motar functions - as illustrated by dimness of vision, loss of hearing, and depression of the reflex muscular move=ments of circulation and respiration.

In considering its application as a therapeutic agent, we will first speak of Quinine as a Tonic.

The mode of its operation as a stomachic tonic is direct, as it possesses the property of local stimulation on the digestive organs. But it acts also as a Tonic by entering the circu=

=lation, which it undoubtedly does; for the proof of which we have only to refer to exper=iments in which Quinine has been discovered in the blood and in the Urine.

In general debility it is excelled by no other Tonic. It owes its pre-eminence as a remedy in this condition to its influence on the nervous system, as well as to its stim=ulant effect on the digestive, blood-making and nutritive functions.

In pure Anemia depending specially on a morbid condition

of the blood, Quinine does little good;— the Analeptic Tonics are then indicated, and are far more efficient.

When debility is produced by profuse suppuration, arising from extensive inflam=mation,— from abscesses existing in strumous constitutions,— in Erysipelas,— or from suppurative phlebitis;— it is important that the strength should be supported until the discharge has ceased. Quinine is then indicated, and can be administered with very decided advantage.

Its exhibition is attended by happy effects, when given in cases of debility connected with excessive secretions;- either from colliquative sweats, or from discharges from mucous surfaces. It acts here not only as a tonic to the general system, but also corrects the discharge which it does very efficiently, when associated with astringents.

In debility depending on diseases of a typhoid character we find cerebral debility, as evinced by dulness, stupor and low delirium. Here Quin=ine is specially indicated

for its rapidly excitant action on the nervous centres.
There is still another condition of debility connected with febrile diseases, which follows when the vital forces have been over-excited in the beginning of the disease. This condition differs from the typhoid, — for while the one is connected with a depravation of the blood, in the other the blood is lessoned in quantity. In this condition, — of which night sweats is one of the surest symptoms, — Quinine has been used with much advantage.

It is in diseases character-
-ized by periodicity in their
attacks that Quinine has
been found of such inval-
-uable value as a therapeutic
agent. Such has been the success
attendant upon its admin-
-istration, that it has become
to be considered as almost
a specific in Intermittent Fevers.
Whether these diseases are
merely of an irritative character,
or depend on Marsh miasm,
as do the Intermittent Fevers
so common in many sections
of our Country; Quinine stands
pre-eminent among the many

articles that have been resorted to for their relief. No satisfactory conclusion has yet been arrived at with regard to the Modus medendi of Quinine in diseases arising from the effects of Malaria. All that is known, is that there is a specific poison giving rise to diseases which are periodic in their attacks;— the essential nature of this poison is un= =known. That Quinine exer= =cises a curative influence in these cases, has been amply demonstrated by the experience of the Medical Profession throughout the world. How the drug

acts;— many theories have been advanced to explain, but as none have proved satisfactory, it is not necessary to give an account of any.

Although it is universally admitted that Quinine stands first, on the long list of articles that have been used as Anti-periodics, there is yet a diversity of opinion as to its admin=istration. The principle point of difference between members of the Profession is as to the propriety of exhibiting the drug in large doses at a period shortly previous to the

expected paroxysm, — or of giving it in smaller quantities repeated at intervals during the intermissions. Those who advocate the administration of the medicine in small doses often repeated, contend that more time is given for its absorption, and that the system is consequently brought more thoroughly under its influence. On the other hand it is known that the drug is eliminated by the kidneys, — this being the case the effects of the drug administered many hours

before the attack, will have had time to pass off, leaving the condition of the Patient the same as before its administration. But when given in large doses a short time before the expected paroxysm, the nervous system is brought completely under its influence, and its recurrence prevented. In adopting the latter view we are sustained by the experience, — not only of the most successful Practitioners of Maryland, — but by the Professions throughout the South and West, where the

remedial qualities of Quinine have been fully tested.

Should the Patient undergo any treatment preparatary to the exhibition of Quinine? Not necessarily. But very frequently there are associated with Intermittents, - constipation with an overloaded condition of Stomach and Bowels, and Hepatic derangement. When the Antiperiodic effects of Quinine are rendered more apparent, by anticipating it by the exhibition of a Mercurial Cathartic.

Although it has been over=

=tained that the administration of Quinine is attended by happier results when given a short time before the period for the expected paroxysm; yet if the disease has assumed the pernicious form known as the "Congestive Chill", and it is feared that the Patient will not survive another paroxysm, and that the inter=mission may be too short for the Anti periodic to produce its effects, - then Quinine may be given before the Patient has passed through either the hot or sweating stage.

The time then best adapted for the exhibition of Sulphate of Quinine, is about four hours prior to the time when the paroxysm is expected to recur. The quantity to be given would be from ten to fifteen grains; — the quantity to be regulated however according to the intensity of the preceding attack. In the pernicious form it is necessary to administer it in doses ranging from twenty to sixty grains. Quinine is sometimes used in the form of Clysters, and

is also introduced into the system by the endermic method. The cases in which it is thus used are when the stomach is too irritable to admit of its administration by the mouth.

Neuralgia which so often assumes a periodic form, is a condition in which Quinine has been found highly beneficial. Whether it depends on Marsh Miasm or is entirely independent of it; - provided it does not depend on any organic lesion, it rarely fails to yield to Quinine. Intermit=

-tent Headache, Catarrh, Scrofulous ophthalmia, and stricture are often greatly benefitted by its use.

When Diarrhoea and Dysentery are periodic, they can frequently be checked by Quinine.

In Acute Rheumatism it has been found more efficient than in Chronic. It should never be used in Rheumatism until Anti-phlogistic ~~have~~ measures have been resorted to.

In the later stages of Typhoid and Typhus fevers, in which there is great debility, Quinine

has long been employed in small doses for its tonic properties, and with indisputable advantage. But not until within a ~~short time~~ comparatively short time, has it been used in the early stages.

If given in large doses early in these diseases, it sedates and represses the circulation.

Although some strongly marked cases of Typhoid fever have been cut short at the eighth or ninth day by large doses of Quinine, in others no effect has been produced, and in still another class

of cases, stupor is increased.

Its administration has been attended by better results in Typhus than in Typhoid Fever. It should be given within the first ten days, in doses of ten grains each, repeated every three hours. It should not be continued for a longer time than sixty or seventy hours. If not attended by good results in that time it will do no good; but may be attended by unpleasant consequences if longer continued.

An
Inaugural Dissertation
on
Erysipelas
submitted to the examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
James Smith Wroth
of
Maryland
1858

This disease is an idiopathic constitutional affection running a somewhat regular and definite course and prevailing as an epidemic under circumstances favorable to its communication as in the wards of a hospital, crowded ships, jails &c. It is attended with a circumscribed inflammation of the skin in some cases merely superficial in others penetrating the subcutaneous areolar tissue producing suppuration often sloughing and gangrene particularly where the tissue is loose as in the eyelids,

The local manifestation of the disease is marked frequently by a distinct rigor though it is for some days by the constitutional disturbances common to blood diseases, such as chilliness nausea

drowsiness sometimes diarrhoea and vomiting.

The general symptoms are languor, aching of general uneasiness, dullness in the limbs and joints, chilliness, rigors alternating with flushes of heat followed by a frequent pulse, hot skin, furred tongue and thirst, restlessness, muscular weakness, and not unfrequently pain of the throat and swelling of the glands in the parts which are to be the seat of the inflammation as in the neck when the face is to be implicated, in the axilla and groin if the extremities are about to be affected

Two or three days after the above symptoms sometimes later or earlier the patient experiences a sensation of heat stiffness and tingling in some part of body but the face is more frequently affected than elsewhere and it appears to have a particular partiality for the nose, side of the chin and the rim

of the ear, which, upon examination are found to be of a deep continuous red color, swollen with hard elevated margins. The redness and swelling gradually and sometimes rapidly advances and invades the subjacent healthy surface under the whole of the face & both are occupied with inflammation. The lips are enormously swollen the the eyes are entirely closed up. The nostrils so much obstructed that the patient can not breathe through them, the lips so stiff that he cannot speak without a great deal of difficulty. And the external meatus of ten so much narrowed as to interfere with hearing, and the whole head so enormously enlarged that the patient could scarcely be recognized by his intimate friends.

I saw a case of the above kind in the Baltimore Infirmary last Summer (1857) in which the general uneasiness

and tumefaction about the head, admitted of no relief upon change of position although the patient itself permitted very often.

Sometimes the inflammation rises for three or four days and then subsides without any apparent effusion of any kind and ends in desquamation. But generally about the third or fourth day the skin is elevated by a serous liquid effusion which has the appearance of minute sudatory vesicles or blisters of considerable size which occasionally run together and form an extensive bulla. The surface is moistened by the exudation or rupture of the vesicles, which begin to dry about the fifth or sixth day, and in a day or two more form crusts which fall off leaving the skin covered with a new cuticle. The inflammation subsides about the time of the formation of the crusts. The whole duration of the disease

is about a week or ten days, sometimes shorter when the patient is in good health and young, and it is sometimes protracted from various causes

Erysipelas varies greatly in different cases from what has been described thus when one part is going through its regular changes the inflammation may advance to another part as pass through the same change and so on from one to another until the whole surface has been attacked.

The fever continues, and sometimes in an aggravated form during the continuance of the inflammation; but in strong constitutions with no asthenic tendency the pulse remains full strong and tense without being very frequent, and unless the inflammation [illegible] the skin, there may be a little delirium. The fever has an open inflammatory character and

need not occasion any unnecessary alarm,
But when the scalp is involved there is strong
evidence of cerebral disorder very often ushered
by headache, restlessness, delerium and what
is a more alarming feature by an tendency
to drowsiness, stupor and even coma when
the disease has reached the brain by penetrating through the cranium posterior
or ethmoidal cells. Sometimes it passes through the mouth into the respiratory
and alimentary passages and produces
effects characteristic of the disease in
those situations

The fever of Erysipelas is often uncomfortable on account of the weak constitution
of the patient, the bad state of his health
at the time of his attack and from the peculiar malignancy of the cause.

There is a occasional metastasis
of the disease to some internal and

vital organs, for example, the brain and heart or their appendages in which case the disease disappears suddenly from the surface with simultaneous evidences of internal disturbance, though these are dangerous complications they are not of very frequent occurrence, and the sympathetic does well, death occurring very rarely under proper treatment unless there is some epidemic influence of a malignant nature or in persons of feeble health or intemperate habits

After death the redness of the skin almost entirely disappears and a brown tint takes its place behind though this is not always the case. Pus is found in small abscesses or diffused extensively in the cellular tissue. And among the muscles, sometimes it is found in the lungs and liver and to have the patient

dies by Edema serous effusion as very often found in the ventricles of the brain and under the arachnoid; the veins of the pia mater are distended in some cases; often there are no morbid appearances found at all

The exciting causes of the disease are cold, stimulant articles of food & drink the mental emotions, suppressions of habitual discharges, and wounds of all kinds but the general opinion seems to be that the above causes will not bring on the disease of themselves without there is a constitutional predisposition produced by the blood poison. Persons intemperate in eating and drinking are very liable to be attacked by it. Anything that has a tendency to depress or debilitate the system, as surgical operations may act as a cause. There is also an epidemic condition of the atmosphere which favors the production of the disease, and it is occasion-

occasionally so strong that the slightest irritation of the surface may bring on the disease, it often prevails in hospitals and is called into action by bleeding cutting or the application of blisters and surgical operations are hazardous though the application of Nitras Argenti diminishes greatly the danger.

Erysipelas occurs at all seasons though it has been asserted that it occurs most frequently in spring and autumn. All ages are liable to it. Women are said to be more frequently affected than men and one attack often no security against a return

The nature of the inflammation of erysipelas is very peculiar, and it derives this peculiarity from some unknown peculiarity of the cause or some abnormal state of the system not thoroughly understood

It differs from ordinary inflammation in its tendency to spread, the distinct boundary it preserves in spreading, the severe burning that attends it and its tendency to gangrene.

The fever seems to be wholly independent of the disease, though it may be aggravated by the local affection for it precedes the inflammation by one two or three days.

(Diagnosis) It is impossible to distinguish the the fever of erysipelas for the first four days from that of the inflammation from other phlegmonous diseases, there is a symptom mentioned by eminent Medical men, which may distinguish erysipelas from other diseases and is considered infallible, and that is whenever the patient has a severe fever for one or two days attended with pain and swelling of the epigastric

glands of the neck, the disappearance of the redness upon pressure also may help the diagnosis, as may the hardness of the part, and the very distinct boundary it preserves in extending.

After the inflammation occurs Erysipelas is the only disease from which there may be any difficulty in distinguishing it, and it may be distinguished by the greater swelling, and hardness, the more defined boundary, and the connection of the diseased surface.

The prognosis is generally favorable in good constitutions. The greatest is an erysipelas of the scalp, as the brain may be secondarily involved, though it sometimes happens without that organ becoming affected. When the disease disappears suddenly and there is vomiting

of internal inflammation or irritation it is unpardonable.

The superficial is much less dangerous than the deep seated or phlegmonous variety, which, when it occurs in the old or intemperate or in those already debilitated by previous disease is usually fatal.

There is great diversity of opinion in regard to the treatment of erysipelas some recommending one thing and some another.

Dr Wood recommends rest & saline cathartics, low diet, and refrigerant drinks in the milder form of the disease and on the part of the physician watchfulness & observation in order that he may be prepared to counteract threatening symptoms that may occur. In severe cases alcohol is has been recommended at the commencement of the disease particularly

where it is of a bilious character I suppose it might be useful if the stomach be loaded with bile and irritating matters, or where the liver is torpid by rousing it into activity.

In the beginning of an attack, cathartics graduated to the violence of the case and to peculiar circumstances would be proper in the majority of cases, the best would be senna and salts, castor oil, either alone or in combination with other cathartics as jalap rhubarb or the extract of colocynth, clearing active purgative excitement, and castor oil and the turbith the best formes. Magnesia or magnesia may be useful to counteract acidity.

Bleeding is used advantageously when the pulse is full and strong and the

inflammation, severe and threatening, and in young strong and healthy subjects.

Bleeding is not so well borne in this disease as in ordinary inflammation because the influence is specific, resulting from a blood poison. The lancet should be regarded with distrust, bleeding can be entirely dispensed with and is rarely used at the present time, relaxation, if required, being generally procured by a mercurial to which may be added a small quantity of Tartar Emetic.

The Serum of the ass or mule of Sir first introduced in the treatment of this disease by Sir Bell of Edinburgh has acquired considerable reputation in the treatment of Dysentery. In fact at the present time it is regarded by the majority of physicians as

as a specific.

Its particular mode of action is unknown, but it is generally supposed to act in virtue of its toxic properties alone. The local application of belladonna and extracts of belladonna are useful adjuvants

An

Inaugural Dissertation

on fractures of the Femur

Submitted to the examination

of the

Dean & Regents & faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

Joseph Hollingsworth

1858

Man made by God in the fashion of Him who also has given life & existence to all created things distinguishing mankind from the remainder of the animal by the power of reason & speech as well as their mighty skill & aspect therefore placing in our possession & grasp the various means by which we are able to alleviate & heal the numerous ills which we all are subjected to in the through the various scenes of this life, from childhood to old age. When we take a retrospective view of the history of mankind in the present period upto the earliest ages we find that it is increasingly interwoven with super & sub-human part of them which prevail, sometimes the containing explanations from lasting minds of the age who have communed with another so stepping into the history of the unknown, which is only partially tested by experience, they found an

disclosed the germ of the greatest improvement in practice of medicine & the art of supporting humanity. I thought I am chosen as the subject for a Thesis, the fractures of the femur in its various forms & complications. I shall treat them in the following order, Intra-capsular transverse fracture, Extra capsular transverse, Oblique fracture of the trochanters begin to lock & may be partly within & partly without the capsular ligament. The fracture of the shaft, & lastly the oblique fracture of either condyle. The above named fractures I shall speak of in the order that I have named them. Shall either the capsular ligament be causes that may produce this injury or simply rule existing & predisposing. The latter are found in persons who are advanced in life & whose bones have become brittle from the diminution of animal matter & an increase of phosphate of lime, also this accident is mostly amongst old females who in common with the above causes

the neck of the femur of a greater length & being
drawn at right angles with the shaft which when
all combined tend to the production of these fractures
by the most slight & trivial exciting cause will
occasion them; such as a fall upon the trochanter
major, upon the foot, the knee & even muscular
contraction will produce them, in the accident
of this characteristic the patient will
be unable to stand, great pain seated prin-
cipally in the upper portion of the thigh
opposite to the insertion of the iliacus & psoas
muscles, place the patient in a recumbent
position & on comparing the two limbs it will
be found to be some one or two inches shorter
& turned outward, let by comparing the mea-
surement between a fixed point of the pelvis
& one below the point of the sup. anterior spine
with a corresponding point on the opposite
side of the body. When the patient is in this
position the shortening is caused entirely
by the action of the muscles.

But when the patient is standing, not only are the part distal to the fracture taken up by the action of the muscles but also the part of the neck internal to the fracture is pressed down by the weight of the body. Though the symptoms are generally less apparent immediately after the injury than at a subsequent period, as it requires some length of time for the complete contraction of the muscles. In several dislocations of this bone at the hip joint we have a shortening, it is therefore of the greatest importance to distinguish the presence of these symptoms from that of fracture, as I have before stated that the shortening in fracture is not as apparent at first as after the injury has been inflicted for some time. Whereas in that of dislocation this symptom is the most prominent & requires strength to overcome the difficulty, not like that of fracture which cannot be so easily overcome by pulling the body stationary & at light.

drawing down of the limb, but as soon as the resistance is removed it assumes its former position. Still farther the injury which this fracture is usually constituting for is the distortion of the head of the femur forwards upon the os pubis. On an accident of this description the limb cannot be moved alone by the patient & but very slightly by the Surgeon it cannot be rotated inward in consequence of the bend of the thigh bone which can be distinctly felt in the groin, which gives rise to considerable pain & tenderness. If it is rotated upward & backward, in accidents of this kind the foot will be inverted & the point of the great toe rests upon the back of the great toe of the opposite foot, also immediately the whole limb: although in exceptional cases of fracture these symptoms are not so strong and when they are present the shortening & inversion are less - the limb can be rotated bent backwards & forwards by the slightest

force, which however causes great pain & there is also crepitus. The peculiarity of this fracture the limb cannot maintain a fixed position it cannot be moved by the voluntary efforts of the patient, but it can be lengthened turned inward or outward on the application of very slight force, but it returns to its former position which in most cases is eversion as soon as the mechanical means are removed. This is a good characteristic symptom, for distinguishing a fracture with the same symptoms of inversion, from dislocation in which case the limb is fixed & cannot be restored to its proper position without violence & when once attained it remains in place & the natural mobility returns.

Again place the patient in a horizontal position & the limb lengthen so as to bring the parts in coaptation. Inspiration may be distinctly discovered by placing one hand over the trochanter major &

then give the limb a quick & violent motion with the other. The union of this fracture does not unite by bone except in few & rare instances. The reason of this want of union appears to be from the following causes viz: The round ligament is inadequate to supply the upper fracture or fragment with nutrition because the fractured surfaces cannot be easily kept in apposition or pressed together & lastly the patient being old in most instances having neither time nor the constitutional vigor sufficient to effect the cure, therefore this fracture seldom is either united by ligament or more commonly it does not unite at all. In instances of this kind the head of the femur fractured becomes contracted & covered with a smooth fibrous deposit & plays in a socket formed by the hollowing & absorption of the bone of the upper fragment.

The capsular ligament & the obturator externus muscles become excessively thick so as to support the weight of the body. The cases in which the union of this fracture is accomplished by bone are stated by Mr Cooper to be under the following circumstances: first "those in which the periosteum is not torn through so that the fractured surfaces are not separated & the ossification of the bone of the bone continues, & secondly those in which the fracture is partly within & partly without, / But it must be evident, that in the former of these cases there will be no shortening, eversion or rotation, in fact none of the distinctive symptoms of fracture; & that the real nature of the injury can be discovered only by dissection!!

Treatment: Persons who fall victims to this sad accident are mostly of two score & ten years & it is therefore useless to sacrifice the

patients little remnant of health, strength years & run the risk of producing stiffening of the nates by long confinement to bed & finally carry him to his long desired home, in hopes of recovering union in time. But on the other hand the patient should be confined to his bed for a short time, place a pillow under the injury & another over the knee, keep there until pain & tenderness abate; then he may get up & sit in a high chair & shortly begin to hobble about the room with crutches & in time he will regain a tolerable use of the limb especially if not very corpulent. The sole of the shoe must be made thick enough to counteract the shortening of the limb.

Extra Capsular harness fracture. The symptoms of this accident are similar in some respect to those within the capsular ligament, we should therefore pay strict attention to the various symptoms so as to be able to

distinguish the one from the other, for the results in the two cases will be entirely different if properly managed. Symptoms; the limb is somewhat shorter in this than the former, there being nothing to prevent the muscles from drawing up the outer or lower fragment, while the inner or upper is pressed downwards by the weight of the body; the feet & toes are everted, from loss of support which the body of the thigh bone sustains in consequence of the fracture. In this injury crepitus can be readily heard, whereas in the other it is with difficulty. The intra capsular fracture describes an arch, this appearance moves upon its own axis. These two fractures may also be confounded with the fracture of the pelvis, such as the fracture of the acetabulum & os pubis, in complication of this characteristic the Surgeon must be careful in giving his diagnosis, he should enquire what was the cause of the

inquiry, requesting the patient to point out the seat of pain - introduce the catheter into the bladder, for oftentimes in accidents of this kind the bladder is injured. Moreover in drawing off the urine if blood be detected we can generally conclude that it is a fracture of the pelvis. It often happens that the bladder is lacerated & the urine escapes into the peritoneum. At other times the urine is effused into the cellular tissue about the pelvis giving rise to sloughing of the parts & extensive abscesses. These I believe are some of the peculiar symptoms which accompany the fracture of the pelvis & from which a discrimination can be drawn from that of the fracture of the head of the femur. Mobility of the bone which though immovable by the efforts of the patient, takes that usual distortion, though it can be bent, shortened, rotated outwards or inwards by the surgeon with slight force,

but it returns to its distorted position as soon as the force is removed. This fracture also differs from the intra capsular one, this is found amongst the young as well as the aged individuals, therefore if a surgeon be called to the bed-side of a patient who has an injury of the upper extremity of the thigh bone, finding the victim to be under the age of fifty, with shortening & inversion of the foot & can be easily lengthened & inverted, he may with few exceptions pronounce it to be a fracture external to the capsular ligament or through the trochanter major. But in advanced age he should make close & careful examination for some months the accident may be distinguished by the severity of the injury which is much greater in this than the former also the suffering is more intense for whilst the intra capsular is produced by very slight causes, & painless.

slight, whereas in this which is always produced by severe blows, fall upon projecting bodies such as against Cobblestone & the passage of a cart &c over the pelvis & by gun-shot wounds. If the hand be placed over the trochanter it will be found to be prominent & when the limb is rotated it will be found to move upon its own axis instead of circumscribing an arc. The upper & fore part of the thigh will be found swollen & tender to the touch also a high degree of irritable fever & months elapse before the patient can be able to use his limb. Oblique fracture through the trochanter major this fracture may be partly within & partly without the capsular ligament. This accident can also be found at any period of life. The limb is rotated like in the two former fractures but the limb is very little shortened, the shaft of the limb is widely separated from

the trochanter. The patient cannot sit & any attempt to do so, produces great pain. In some cases the upper fragment is drawn forward towards the ilium, in others towards the tuberosity of the ischium, in instances of this characteristic it is with great difficulties to hear crepitation. The diagnostic symptoms of this accident are a fixed state of the upper fracture, whilst the lower is in obedience to the motion of the thigh bone; eversion of the foot & the very perceptible altered position of the trochanter major; if the parts be brought in apposition & then make for movement of the upper portion of the limb crepitus can be felt & heard, If the fracture should be below the insertion of the rotating muscles, the action of the gluteus maximus muscle is lost. The bone up thereby causing a considerable shortening of the limb. In this accident there

will be a firm union by bone & more speedily than when the cervix is broken at the root of the trochanter, & the patient recovers with very good use of the limb. This fracture is usually the result of very great violence applied to the trochanter. Fractures of the Shaft of the bone. In accidents of this character the Surgeon is often informed of the nature of the fracture before he sees the patient, therefore the symptoms are so conspicuous that it requires, but little examination, to give the nature of the injury. Symptoms acute pain at the moment of the injury, unable to sustain the superincumbent weight. Angular deformity in raising the limb, - sudden inability to move the limb by the voluntary action of its own muscles, these are symptoms that follow in most every case. There is shortening of the extremity if the fracture be oblique.

varying in extent according to the obliquity. To ascertain the extent of shortening or longitudinal displacement take the anterior superior spinous process of the ilium & some known point below the fracture, say the head of the tibia; compare this with the corresponding points of the opposite side of the body. In cases where the fractured ends of the bones are much splintered they often lock into each other then the shortening will be found to be but little & the shortening that should happen to take place may not be seen at first as the contraction of the muscles by which it is produced is gradual. Again if the fracture be transverse there may be no shortening unless the violence which produced the injury be of such a manner so as to displace the fragments so that they overlap each other, the upper upon the lower or vice versa. In this transverse

fracture crepitation can be more readily heard, than in the old age, by rotating the limb. Impaction to a considerable extent may be present, the foot is frequent turned outwards. The position of the displaced fracture if it be oblique & not near either of the extremity of the shaft, the parts above the fracture have two & those below generally have four particularities of displacements. The psoas magnus & iliacus internus muscles which are inserted into the trochanter minor draw the upper fragment inward upward; outward by the gluteus maximus which is inserted into the rough line leading from the trochanter major to the linea aspera. The lower fragment is displaced backwards & inwards by its own weight. The adductor longus brevis & magnus their course being from within outwards. & thus they draw

the lower fragment inward. It is rotated inward. This occasioning excision of the extremity, some Surgeons attribute this to the mere weight of the limb but it is manifest the fibers of the adductor muscles having the planes of their insertion farther back than the planes of their origin they will draw inward as follows viz;- Adductor longus arises by a round tendon from the front surface of the os pubis just below the angle, inserted into the middle third of the linea aspera. Pectineus arises from the lower & anterior of the os pubis & inserted into the upper third of the linea aspera, Magnus arises from & by a fleshy fiber of the ramus of os pubis, ischium & inserted into the whole length of the linea aspera. It therefore can be readily seen that these muscles assist in producing a rotation outward & they will have a great tendency to do so in consequence of the

falling back of the lower fragment, which makes the planes of their insertion, to be back than usual from those of their origin.

Oblique fracture of either condyle. This accident may be recognised by the crepitus which is felt on taking a firm hold of the condyles of the femur & with the other hand causing flexion & extention of the knee joint. The mobility of the condyles are caused by the alternate contraction & relaxation of the gastrocnemius muscle. If the leg should be flexed upon the thigh a tissue may sometimes be detected. The injury is sometimes of the inner & then of the outer condyle extending down into the knee joint & when it thus extends into the joint it has been known to be followed by inflammation of the knee joint & by that means has given rise to serious consequences. Should both condyles be fractured the symptoms are still

more distinct, crepitus & mobility would be the leading. Upon flexing the knee, its breadth would greatly increase by the separation of the condyles & the patella sinks deep into the natural space between. It is possible that this fracture of both condyles may occur & yet the most striking deformations will be found wanting. The rectus muscles passing around either condyle to be inserted into the patella, prevent great displacement or distortion. However the fragments have a tendency to be slightly drawn backward by the gastrocnemius externus. & that of the inner condyle by the adductor magnus, it is also drawn a little upward by the same muscle. The cause of this accident would appear to be ... the fall from a considerable height upon the feet, knees & ankles when drawn upon the condyles when the leg is semiflexed.

We have now gone through with the various signs & symptoms of the various fractures of the Os femoris, therefore the next thing in order is in what manner & by what means are we to employ to ensure to the patient a limb which shall not fall far short of that which nature gave him unharmed. In the first place we should obtain coaptation of the fractured portions of the bone & then employ those mechanical contrivances which will keep the parts properly adjusted & at the same time employ such that will secure comfort & rest to the patient which is an all important item to a sufferer who has fallen a victim to an accident of this kind & finally to prevent any unpleasant symptoms & relieve them when they do come, as surgery in common with all other sciences is progressive, so must it follow that

increase of experience must tend to fail either to the confirmation or the condemnation of principles laid down by ancient & modern Surgeons in the treatment of fractures & I like most other students during their collegiate course read much of the numerous mechanical inventions & various attitudes & positions which these men of science & skill have taught & have written largely upon, I will therefore select several of the appearances from amongst the number. In the treatment of extra capsular transverse through the trochanter major which may be partly within & partly without the capsular ligament. Profs Liston & Saml Cooper advocates the following plan of treatment, placing the patient on a hard mattress in an extended position with trunk, thigh & leg in a straight

line with a common bandage being applied from the toes to above the knee to prevent oedema & coagulation having been obtained by extending the extremity; the splint which they employed is something after this order; a long straight splint of sufficient strength & breadth & long enough to extend from the last rib to three or four inches below the foot, at the upper extremity it has two holes, the lower two notches, this splint is well padded & then applied to the outer side of the limb, care being taken to protect the ankle by a suitable adjustment of pads; the leg & foot is then fastened to the splint by means of rollers, after some turns of it is applied to the ankle, it is then carried through the notches of the lower extremity of the splint, fastening the foot in such a manner so as to prevent

it from moving. A broad roller is then applied around the pelvis & upper extremity of the splint, this bandage is carried down the thigh so as to include all the parts above the former roller, by this means the fractured extremities of the head of the bone are kept in close contact. For extention & counter-extention place a well padded bandage, the centre of which is placed in the perineum & one extremity passes behind on the posterior part of the pelvis & inserted into one of the holes at the upper extremity of the splint, the other extremity of the bandage passing in front & fastened in the other hole of the splint, there should be great care taken in wadding this bandage so as to prevent galling of the skin. In this case the pelvis acts as a fulcrum & the perineal band as the power,

by keeping this properly applied the limb can be kept down as it was, immovably fixed to the splint, therefore by maintaining this tightness, the proper length of the limb can be secured; this should be continued for seven or eight weeks, but this will vary in different cases according to the time necessary for the production of union. This splint has also been used in fractures of the thigh with high thesis & improvement (using a long the upper end so as it shall reach to the axilla) this removes the line of the counter-extending band very near in a parallel line with the body. When applying this apparatus great care is required to render it effectual & at the same time as comfortable

as possible to the patient, much will depend upon the accuracy of the adaptation of the bandage & upon the character of the material used for the extending & counter extending bandages & their proper application. In other respects this splint is the same as the last named, although the second or the anterior splint will be required in many cases. The skin should be carefully examined every day & bathed in soap liniment. The next is Hagedorn's apparatus with Prof. Gibson's modification. This method consists in extending the patients limb upon a mattrass, & confining both feet by gaiters or a handkerchief to the footboard of the bed, which is firmly secured upon the ends of the two splints passing

through mortices near its edges, three splints like the two former extending from the axilla where they are padded like the head of a crutch passing along the side of the body, thigh & leg extending beyond the foot, it is also padded the whole length of its inner surface so as to prevent irritation. It is then confined on either side of the body by six or eight broad tapes passing around the chest & extremity at equal intervals. The extention of the sound limb in the use of this apparatus serves as a splint to the broken limb, counter-extention then is made upon the acetabulum of the sound limb & extention upon the ankle of the injured limb.

As long as the feet are kept on the same level, there cannot be shortening provided rotation of the pelvis is prevented. Another method is that of Endlichs splint the double inclined plane recommended by Sir Charles Bell in which the patient is placed on his back with the trunk raised, the thigh slightly flexed on the body & the leg upon the thigh. The leg & thigh should be inclined in a roller along with the splint also three short wooden splints applied one above & the others on either side over the fractured extremity. Mr. A. Cooper recommends this splint in the fracture of the neck of the thigh bone without the three short splints & also for the condyles of the lower extremity of the bone.

I have spoken of several modes & manners in which the fractures of the femur are healed & which we find recommended in various surgical writing & also taught in most of the American & European schools but yet, it is with feeling of no slight gratification for me to mention one mode which is in my humble opinion has not its parallel upon the pages of Surgery although it is not extensively known but wherever it finds its way even amongst prejudiced minds, it must be received by those who possess rational minds as an apparatus which is right improvement to the profession & to the cause of suffering humanity. Prof. W. P. Smith who fills the chair of Surgery in the University of Maryland

introduced some five years ago into the Baltimore Infirmary & also to his class the following session what is known as "Prof. Smith's Anterior Splint." This apparatus is the most simple of all splints of which I have spoken in its structure, composed of wire varying from a half to three fourths of an inch in circumference shaped in the form of a rectangle parallelogram its length four to four & half feet, running from the tip of the toes to the anterior superior spinous process of the ilium - breadth three to three & half inches. It is divided into some six or eight equal parts by cross pieces of wire for the purpose of giving it strength & pliability when applied. In the use of two of these short splints there is a limit

formed, as if it was a spontaneous twist
this is not drawn tightly down but leaving
a hole in each for the purpose of attaching
a cord of sufficient strength to sustain
the weight of the limb when suspended,
One of the wires is placed in the upper
half & the other in the lower half of the splint.
Before application, it is bent in a form
so as to flex the thigh upon the body, the
leg upon the thigh & foot extended, — it
is then envelopped in a roller from one
end to the other, allowing the knobs in
the short wires protrude through the band-
age, however if it be a compound fracture
or any wound which will require after
treatment, a space should be left direct-
over the injury — next apply an outside
compress the full length of the limb.

on the whole space which the splint shall occupy, again if there be any injury that which will require further treatment on the anterior portion of the limb, it should be passed uncovered. All things now being ready, the splint is adjusted in the following manner, placing it directly upon the compress, attaching it in the first place by means of adhesive strips, commencing with one around the foot, another the ankle, the third below the knee-joint over the calf of the leg, if the fracture be of the condyles, one should be placed close to the joint below the knee, another on the thigh just above the fracture, then still another farther up the limb, and if it be a fracture of the shaft of the bone place one on each side of the fractured extremetys, a short distance from each other

If it be a fracture of the neck of the bone extracapsular ligament care should be placed as far up on the thigh as possible however in case of fracture of the neck of the bone it will be requisite in the first place to apply the starched apparatus, placed carefully over the trochanter major extending up as high as the crest of the ilium on the first short rib, & down as far as the malleolus of the thigh, this properly applied will keep the fractured extremeties in contact, then apply the anterior splint as counter-extension. After having the splint properly fastened by the adhesive strips, which should be applied to suit each & every case, the limb is then swung by the cord, of which I mentioned above, each extremety being armed with a hook which is inserted

into the kink of the shirt wire, one place over the thigh, the other the leg, then employ a single cord fastened to the joice immediately over the limb, extending down to be attached to the other, on this end there is a tent block employed, by which means the limb can be carried on longer or shorter as the nature of the case requires. Counter-extention can be produced by the slipping of the cord which can be regulated according to circumstances. Now to the completion of the adjustment of the splint, employ the the roller commencing on the foot going up the limb & by this means every turn of the bandage forms a surface perfectly adapted to the shape of the limb, this should be applied to the whole length of the limb unless there be a point which will require

notice, then strips & pass on above as below, now we have equal pressure extending to all parts of the limb. The patient is now relieved from all suffering & let the motion of the body be what it may it will be a matter of impossibility to distort the fractured extremities. He can at any time release himself of a vicarious position by moving up, down, or to either side of his bed without molesting or harming the injured limb in the least degree, on the contrary it readily obeys the commands of the body. If it be a compound fracture it must first be placed in a proper position & then close the fracture, if a sharp end of the bone protrude & it cannot be easily returned or kept in proper place it should be taken off, any bone fragment or splinters of bone

should at once be removed & if necessary the wound may be dilated for that purpose. Placing it now in the anterior splint which relieves the sufferer of his misery & also the excited condition of the wound which was greatly aggravated & the danger of tetanus, which also had a tendency to long continued diseases of the bone. The great object now is to procure adhesion of the external wound, so as to convert it into a simple fracture & the best application is a piece of lint dipped in blood or the compound tincture of Benzoin - the advantage we have in this splint over all others is that the wound can be dressed without disturbing the fracture. When swelling & inflammation come on the adhesive

strips should be relaxed & cold be applied if agreeable, opium with Antimony & saline draughts - laxatives or enemata if they can be given & sometimes though very rarely bleeding will be required.
The great object in the subsequent treatment is to prevent the lodgement of matter, this can be accomplished by sponging & pressing it out carefully at each dressing & applying compresses to prevent its accumulation having the limb lifted from the bed there can be placed beneath the limb a small vessel to catch all sloughing & pus that discharges itself from the wound. Here is an advantage over all other operations in them it matters not not at amount the filthy collections may be, the wound is not placed in that position in which it can allow

Healt

On the application of all other splints the patient is commanded to remain stiff & quiet, Why? because the least move that is made by the body the lower fragment is thrown out of relation to the upper, therefore he is compelled to remain in one position for six or eight long weeks fearing to move in the least either to the right or left knowing that distortion of the parts, pain & suffering must follow & on the other hand remaining in a fixed position over a time of the critical & bad cases must take place & this is frequently attended with unhappy results. It is therefore perfectly evident that the Gunning splint possesses many advantages over all others which should secure for it a lasting reputation in the pages of surgery as the greatest discovery in modern & American Surgery.

An
Inaugural Dissertation
On
The decarbonization or oxygenation
of the Blood.

Submitted to the examination
of the Physic,
Provost, Regents and Faculty of
the University of Maryland
for the
Degree of Doctor of Medicine.

By John Thomas Willard
of Frederick Co, Md.

At the same time it is made the vehicle of removal from the tissues, substances which are no longer capable of performing any important condition; having become extraneous matter and it is thrown off from the system by the excretory organs. We shall next speak of the most deleterious substance introduced into the nutritive fluid if allowed to accumulate, and that is Carbonic acid. The sources of this injurious ingredient are various. In the performance of the functions of Organic Life, which cease to effect the Nutrition of the body, disintegration is constantly going on, the tissues under-

going a Change, their Vitality being destroyed, giving rise to Carbonic Acid. In any Organized Structure, the rate of Life, and amount of disintegration, are governed in a great measure by the Temperature of the body: those that live the fastest die the sooner. Another source of Carbonic Acid, consists in the rapid changes which the nervous & muscular tissues undergo, during the respiratory act: In this process a large quantity of Oxygen is generated. Independent of these sources, another mode of generation of this substance, which is confined almost exclusively to the higher Classes of animals - Birds & mammals, which have the power of

maintaining a higher degree of temperature. This augmentation of temperature is generated in part by the oxygenation of the constituents of the tissues, in a state of disintegration. When this is not sufficient, another power is brought into requisition, and that is the direct combination of certain elements of the food with the oxygen of the atmosphere, by the process of combustion; or in other words, the conversion of the Carbon and Hydrogen of the food into carbonic acid and water, the quantity varying with the amount of heat generated. Now in order to maintain a normal action of the animal organism, it is absolutely necessary, that the vital fluid must be

oxygenated or decarbonized, for in proportion as this process is imperfectly performed, do we observe the deleterious effects arising therefrom, as we shall see in our further investigation of this subject. The atmosphere is composed of Oxygen, Nitrogen and a small quantity of Carbonic acid; of the former about one fifth, of the second, nearly four fifths, the remainder being Carbonic acid. Oxygen is obtained from the Vegetable Kingdom; plants throwing off Oxygen, and absorbing Carbonic acid. The first product which is separated from all organized structures, is Carbonic acid. and as we have seen, the one that accumulates the most rapidly in the system; the retention of which

produces very injurious results. This however is obviated by the healthy action of an important organ; the Pulmonary Apparatus, to which the whole current of venous blood passes previous to the sending of it again through the system. Here the blood is subject to the influence of the atmosphere during respiration, whereby an interchange of Carbonic acid for Oxygen takes place; the former with which it was charged, being removed and replaced by the latter this alteration taking place through the membrane that lines the air cells. Professor Draper, in order to explain the complete introduction of atmospheric air, and the changes in the contents

of the air vesicles; speaks of the well known agency of the organic muscular fibres of the bronchial tubes, which are supposed to possess the property of changing the calibre of the tube: He explains with this agency, the act of respiration as follows. The carbonic acid, vapour of water and excess of Nitrogen, if any, which have accumulated, in the pulmonary vesicles, belonging to any given bronchial tree are expelled therefrom by the muscular contraction of the circular organic fibres, and are delivered into the large bronchial tubes, in which diffusion at once takes place, with the air just introduced.

As soon as the expulsion is perfect, relaxation takes place in the muscular fibres, and passages and cells dilating, both through their own elasticity and the exhausting effects, arising from the simultaneous contraction of the other bronchial tubes; fresh air is drawn into them, the alternate expulsion and introduction being accomplished by muscular contraction and elasticity." The mode in which the vitiated atmosphere is expelled by the muscular contractions of the tubes, bears a close relation or analogy to the peristaltic action of the intestinal canal. The actual amount of air which circulates through the

Pulmonary Apparatus in twenty four hours, will vary in proportion to the frequency of the respiratory movements; being diminished or accelerated by various circumstances, and more particularly by the relative degrees of repose and exertion. The quantity set down by Coathupe, is three hundred, sixty six and one third cubic feet. Vierordt, made observations upon his own person in a state of repose; the amount as stated by him being three hundred, six and two thirds cubic feet Valentin's estimate being three hundred ninety eight and one half. This last experiment was no doubt made, during a moderate degree of exertion upon the part of the patient experimented upon.

The absorption of Oxygen and exhalation of Carbonic acid, (that is the relative amount,) depend upon certain conditions: Animals fed upon nitrogenized food, absorbing a greater quantity of Oxygen, than those fed upon non azotized substances. The explanation of this as given by physiologists, is as follows. The hydrogen, as in sugar and starch, is already provided with its equivalent of Oxygen, the Carbonic generated by their Combustion, will contain the whole bulk of the Oxygen consumed, consequently the small per centage of Oxygen which disappears in the respiration of herbivorous animals, must be appropriated to other purposes.

in their economy. But when fat is the material consumed, the Oxygen contained in the Carbonic acid that is generated, will be only three fourths of the whole amount that disappears, the remaining fourth being appropriated by the surplus hydrogen to form water. When an animal is kept fasting, the Oxygen absorbed and Carbonic acid exhaled is about as great as if the animal had been fed on flesh. But soon injurious results will be brought about by this condition; the inhalation and exhalation of these substances are maintained at the expense of the whole of the animal economy.

The removal of Carbonic acid from the blood, may be effected independent of an oxygenated atmosphere; notwithstanding the opinion which was formerly entertained, the the Carbonic acid exhaled was generated in the Lungs, by the combination of Oxygen derived from the atmosphere, with the materials of the blood which contained Carbon; it is now pretty well established that Carbonic acid exists preformed in venous blood, and that the arterial circulation receives the Oxygen introduced, instead of its being at once returned to the air in the state of Carbonic acid. Experiments made upon frogs by Muller, Collard de

— Martigny and others, have gone on to prove this fact; when frogs, kept in in Hydrogen for several hours, the exhalation of Carbonic acid was as great as if they had been placed in atmospheric air. The experiment was repeated by using Nitrogen instead of Hydrogen; the result being the same.

Muller found that the quantity of Carbonic acid exhaled in hydrogen; was nearly a cubic inch in six hours and a half: in another experiment, the amount given off, in Nitrogen, was about the same; although a longer time was requisite to produce it.

The superior tribes of animals as Birds and Mammals, in a state of

adolescence, cannot live only for a short period, in an atmosphere wholly deprived of Oxygen: the vital operation being very much accelerated; it is absolutely necessary, that there should be a constant supply of this vivifying agent, for without this, the passage of the blood through the Lungs would be arrested; owing to a disordered condition of the capillary action. During expiration, the air which is exhaled, differs from that which is received by inhalation:- The proportions of Oxygen, Nitrogen and Carbonic acid being changed, having at the same time received a greater quantity of watery vapour.

This is supposed to be produced by its being exposed to the warm blood which is spread over a surface of great extent; the intermediate membrane being very permeable - The usual amount of watery vapour exhaled in twenty four hours, is from 16 to 20 ounces. Although the Pulmonary Apparatus, is denominated the special organ, whereby the blood is decarbonized, still, there is another medium through which an interchange of gases is effected, which deserves a passing consideration, in treating of this subject. This medium is the Cutaneous Surface, This is more observed in some of the lower tribes of animals;

performing as it does, a most important condition in their process of respiration: Even in certain Vertebrata, the respiration through the cutaneous surface, is capable of maintaining life for a considerable length of time. We have an evidence of this in the Batrachia; the skin being soft, thin and moist. Bischoff ascertained from experiment that after the extirpation of the lungs of a frog, a quarter of an inch (cubic) of carbonic acid was exhaled from the skin in eight hours. It has been remarked, that it is not an uncommon phenomenon, that the lividity of the skin, which supervenes in

Asphyxia - owing to the imperfect oxygenation of the blood - has been supplanted by the fresh hue of health; brought about by the action of the atmosphere upon the blood, in the Capillaries of the Cutaneous Surface.

From what has been stated, one would suppose that there is a vicarious action, existing between the skin and lungs; or rather since this condition existing between the skin and nephritic organs. We shall next consider the effects produced by a deficient or suspended respiration. The first effect of the non-arterialization of the blood in the Pulmonary Apparatus, is that

the flux in the capillaries is retarded: this retardation, produces an accumulation in the system of venous blood, and consequently an insufficient supply to the arterial. The imperfectly arterialized blood will find its way back to the heart as long as there is a considerable proportion of Oxygen, remaining in the lungs, and the amount of carbonic acid is small; consequently a considerable period of time will be requisite, for the stagnation to become complete. But this blood not being sufficiently decarbonized has a tendency to depress the powers of life, — the nervous centres — this

This being increased, by the gradual diminution in the quantity of the blood propelled to them, producing a suspension of the powers of the Sensorium; resulting in unconsciousness of External impressions.
The movements of respiration are also interfered with, owing to the exhausted condition of Medulla Oblongata. The obstruction in the capillaries of the lungs, is increased by the exhaustion of the Oxygen of the air, in the pulmonic system; Carbonic acid accumulating in the blood from this cause, the systemic arteries, are deprived of a sufficiency of blood; the vivifying influence of

that which is transmitted, is partially destroyed, becoming more and more venous, until the nervous centres are in a paralyzed condition, the movements of respiration are arrested: The depravation of the quality of the blood, with an insufficient supply, has a marked effect upon the myological system; weakening the contractility of the heart especially—
The cessation of the heart's action is attributed to the two following causes, 1st an accumulation of venous blood in the right ventricle producing distension of its walls 2nd the amount on the left, being

less than is requisite to stimulate it, whereby the movements are maintained for only a short period of time. If the arrest of circulation has not been of too long duration, it may be again re-established by artificial respiration; for by this mode, there will be an interchange of oxygen for carbonic acid, in the air cells of the lungs. in this manner, the circulation in the pulmonary capillaries is restored, the right ventricle returns to its normal condition, the left at the same time responding, to the proper stimulus. From what has been stated, we perceive that the

the stagnation of the Pulmonary Circulation, is owing to the want of oxygen; being renewed by the ingress of the vivifying agent: the explanation being that the performance of the normal reaction between the blood and surrounding medium - whether air, water or solid organized tissues - is a condition necessary to the regular movement of the blood through the extreme vessels. It is scarcely necessary to mention the fact, that the same air repeatedly passed through the lungs, although in its primary state pure, may become impregnated with so great an amount of Carbonic acid

as to be absolutely unfit for the aeration of the blood, inducing in time Asphyxia. An evidence of this in the Black Hole of Calcutta. An atmosphere, loaded with the effluvia Exhaled from One of the Airpoc of life, and the Skin, is one of the most powerful predisposing causes of disease; particularly those called Zymotic, the propagation of which, seems to depend upon a something in the blood, analagous to a fermentible matter. It has been demonstrated that if the respired air contains a small per cent of Carbonic acid; there will be a

diminution in the quantity of this substance thrown off, also in the amount of Oxygen absorbed; Consequently oxidation will be imperfectly carried on, and the elimination of effete matter from the system being effected in this way, there will be an accumulation in the blood, substances which have a tendency to undergo decomposition. No doubt there will be an increase in the Pulmonic exhalation, as well as the cutaneous, and the atmosphere so changed, not receiving a fresh supply, is loaded not only with Carbonic acid; but also with an

accumulation of a morbific substance, which acts very deleteriously upon the animal economy. The major portion of the Medical world, agree in the opinion, that the most potent predisposing cause of Cholera, is overcrowding, the atmosphere being charged with the emanations from the human body, the inhalation of which gives rise to the above disease. Another condition of the atmosphere analogous to that of overcrowding, is the effluvia emanating from drains, Slaughter houses, sewers Et Cetra. How requisite then is free ventilation in order to maintain a

normal Condition of whole organism, the spirits are buoyant: the Cheek presents the florid hue of health, all the organs perform their proper functions, and the individual, rejoicing in the might of his majesty, dashes by like the swift winged arrow of light, and like unto the Titans, pile Mountains upon mountains, in order to reach the Summit of that Temple which is Fame.

No.

Inaugural Dissertation

on

Inflammation

Submitted to the Examination

of the

Rev. Wm. Hamilton, Jr.

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

John [illegible]

of

Maryland

1856

To

The Faculty of Physic

of the

University of [illegible]

[illegible]

[illegible]

in [illegible]

[illegible]

[illegible]

Introductory.

I have chosen the Venereal Disease, as the "Inaugural" of the Candidate for the Degree of Doctor of Medicine. In Thesis upon some Medical subject, I have chosen as the subject of my dissertation, Syphilis. The subject is grand, presenting an extension field for research. But the Author is special, and practical, as it affects, in a degree, his abilities, I mean the practice which it requires. Its various phenomena, causes, &c. have been brought, step by step, before the profession, and the clinical observations in the Baltimore Infirmary, & other

in the [illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]
[

Inflammation.

The term Inflammation, or from the Latin verb inflammare, to burn, is applied pathologically to a certain process or series of phenomena usually characterized by redness, heat, pain, & swelling; which have been from the earliest ages, considered as the indications of inflammation in any part of the system in which they are found. The absence of one or more of these symptoms is not incompatible with the existence of inflammation. Thus the degree of pain will vary much, and is sometimes entirely wanting according to the part affected; it should be considered of often the strength & health of

[illegible] before the inflammatory action ceases. So, the swelling which attends inflammation is also subject to [illegible], [illegible] the other [illegible] are, [illegible] in [illegible] and the [illegible] inflammation. The nutritive [illegible] processes are [illegible] or hypertrophied; [illegible] "[illegible] perversion of nutrition or [illegible] in the [illegible] tissues of inflammation."

[illegible] commonly [illegible] phenomenon is fever, more or less un[illegible] [illegible]

observable phenomena [illegible]
=mation, It is a [illegible]

from this point to the [illegible]
indicated in the [illegible]
It often disappears when the
inflammed part is pressed upon
and returns when the pressure
is removed, the rapidity with which
it returns indicates the
limit of the circulation in the
part. Sometimes however it does
not be removed by pressure, in
consequence of the engorgement of
the capillaries and the stagnant
vascular state of the part. In all
the inflammation, is owing to
an increased determination
of blood to the part, the
part also the part of the
new vessels, which occasionally
the microscopic observation
[illegible] particles of
extravasated blood, or [illegible]

inflammation has been [illegible]
The capacity of the capillary ves-
sels is increased, and they
admit a greater [illegible] of
blood, which is [illegible]
[illegible] the der-
mis vessels. This [illegible]
exhibited in some cases has
been suggested. [illegible]
moving the passage of the blood
[illegible] from the [illegible]
into the veins, which has since
been proved by microscopic obser-
vation.

With the increase of redness
there is generally an increase
of heat [illegible]
[illegible]
Hence it has been [illegible]
[illegible] the heat of
[illegible] of the blood [illegible]

Consequently the heat must be most [illegible] in the [illegible] which [illegible] from the centre of the [illegible], and [illegible] of which the [illegible] is the most [illegible] [illegible] cause of the heat, is an increase of the [illegible] of the blood [illegible] the [illegible] increase [illegible] in the [illegible] of its circulation, [illegible] that vital [illegible] of the [illegible] of heat [illegible].

[illegible] is [illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

in health, becomes very [illegible]
[illegible] implicated.

The cause of the pain is a [illegible]
hypertrophied condition of the [illegible]
nerves involved. It seems also [illegible]
depends upon the nerve [illegible]
part being compressed by the [illegible]
surrounding tissues, which [illegible]
[illegible] swollen. In some of the [illegible]
-ness, it seems to be increased [illegible]
by each pulsation of the heart, [illegible]
producing intolerable or almost [illegible]
pain. The [illegible] [illegible]
[illegible] increased [illegible]
the artery.

The [illegible] [illegible] [illegible]
inflammatory lesion of the [illegible]
the other glossopharyngeal branches
being [illegible] [illegible]
in the mucous [illegible]
[illegible] tonsils, as in the

[illegible]

[illegible] most [illegible] conquered to the [illegible] colonies, [illegible] it, [illegible] [illegible] [illegible]

establish the secretion in the most abnormal circumstances, in the suspension of the vital processes also, and under the influence of [illegible] stimulations. But the progress of the disease [illegible] secretory functions is again [illegible] into activity which must alter the secretion; the secretion [illegible] three opinions [illegible] Dr. Hall, Dr. Prichard, relating to [illegible] the [illegible] of the secretion. The [illegible] the kidneys maintain [illegible] fact, are, as Dr. Bright and Dr. Hall first a regular [illegible] from distant supply, [illegible] a right state of [illegible] that blood; [illegible] (at least in most cases) a certain [illegible] of the nervous force; [illegible] a

normal state of the part in which nutrition is to take place. These are usually attended with inflammation. Blood is drawn to the part, the blood vessels become distended, the matter, usually lymph or serum, or water, rains out of the blood, and the red corpuscles of the blood assume the form of a coagulable lymph or fibrin. Part of the fibrin is found in the cells, while the albumen and portions remaining in the water and salts remain in the form of serum. The cells are not all alike, as it may have been observed, in respect to the form of their bodies, or the number of their processes.

[illegible] concrete, but it [illegible] in or the [illegible] completely [illegible] is not undergoing [illegible] [illegible]

Whilst [illegible] is [illegible] place in the [illegible] such as the contraction of the capillaries in the [illegible] dilatation, the formation of new small vessels, [illegible] the capillaries allowing the passage of the [illegible] particles [illegible] [illegible] the [illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

The long coat is the best exhibition of the evils of [illegible] instances, as in the advanced stages of [illegible] [illegible] [illegible]

and anaesthesia

Various opinions have been advanced as to the immediate cause of death. [illegible] the investigations [illegible] the deposition of [illegible] the [illegible] tion of fibrin, the rapid subsidence of the red corpuscles, including in a great measure the coagulation [illegible] the increased contractility of the fibrine, and the abundance of colorless corpuscles. Gen. [illegible] pens that death is not from an inflammatory case idiotic. [illegible] remembers that the [illegible] the blood is in minute inflammation [illegible] [illegible] the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

The causes of inflammation are numerous and [illegible]

call it mechanical, the
[illegible] and [illegible]
among the [illegible] of
may be ranked a particular [illegible]
[illegible] the inflammation [illegible]
perhaps on the instability in the
morbid part itself; [illegible]
[illegible] the inconstancy of
the best state of health; and [illegible]
[illegible] that the general health is not
in such cases concerned in the
morbid change. Still [illegible]
[illegible] the blood [illegible]
able of the morbid influence of
external causes. The [illegible]
[illegible], also, [illegible]
possible causes.

Among the external causes are
cold, noxious gases, acids, morbid
poisons, intoxicants, blows, [illegible]
lies, contagious and epidemic [illegible]

In the treat[illegible] in[illegible]
:ation, the leading objects to be kept
in view, are, first, to obviate the [illegible]
ting causes; second to prevent [illegible] that
ever may lead to the [illegible] of
inflammatory action; third to [illegible]
ence if possible, the [illegible]
resulting from the inflammat[illegible]
fourth, to prevent [illegible]
and violence of the inflammat[illegible]
we cannot obtain resolution [illegible]
the [illegible] result, [illegible]
[illegible] and [illegible] work, [illegible]
our space here will not permit [illegible]
describe [illegible] [illegible]
[illegible] [illegible]
[illegible]

The chief means to [illegible]
these objects, are venesection, [illegible]
and vaccination, the prime [illegible] [illegible]
[illegible] antiphlogistic [illegible]

[illegible] letter; which should be resorted to immediately, [illegible] cases to approach [illegible] which immediately [illegible] upon the heart by the abstraction of a part of its natural stimulus, the blood; — and [illegible] upon the brain by its not receiving a due supply of arterial blood. After the deprivation resulting from bleeding, there will follow a [illegible] be perceived [illegible] [illegible] reaction is prevented, [illegible] [illegible] Opthalmia, [illegible] [illegible] [illegible] secretions, [illegible] [illegible] [illegible]

[illegible]

The Pentaphlogistic

[illegible]

dation [illegible]

[illegible]

nation of the phenomena [illegible]

however it has [illegible]

[illegible] reasonable. It can [illegible]

very advantageously combine [illegible]

[illegible]

reasonable. It rests [illegible]

[illegible]

[illegible]

[illegible] and reacts [illegible]

its immediate origin.

The negatives are rejected, when there is no reason in the affirmation. They remove from the [illegible] all imitative and [illegible] distances, and place the [illegible] in a condition to receive [illegible]

An
Inaugural Dissertation
on
Hemorrhage

Submitted to the examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland

For the Degree
of

Doctor of Medicine
By John Bacon Lacy.
of New Kent County
Virginia

Inaugural Thesis

From various associations there are few subjects in Medicine or Surgery that are more worthy of our attention than the subject of Hæmorrhage, which we have selected to form a Thesis to submit to the Faculty of the University of Maryland for the degree of Doctor of Medicine.

The Modes of arresting bleeding from wounded vessels has occupied the attention of many of the most eminent Surgeons that have ever adorned our profession.

When we are called

to a person who has received a wound the bleeding will always require attending too. The common sense of mankind teaches them it is the main thing demanding attention

The modes of arresting Haemorhages have been divided into Chemical, and Mechanical. Under the first division will come Fire, Cold, astringents, and Caustics.
And under the second Compression, Torsion and the Ligature.
And from a very early period mankind, have been accustomed to resort to Fire, as an

agent to suppress the hemorrhage.
They generally applied it by means of a red hot iron, which acted they thought not merely as a cautery, but also as an astringent, and as a means of adding to the astringents of these cauteries they heated and quenched them from time to time in red wine or strong vinegar, they were engaged in discussions in reference to the best metals for the making of the cauterizing irons.
Their mode of application of the cauterizing irons were to have a number of cauteries heated at once. They first stuck the artery against the side of the gale

and there they turned and twirled the cautery upon the mouth of the artery till the blood stopped.
And as it has been most graphically observed, - the horror of the patient and his unspeakable cries and the hurry of the operator and assistants, the sparkling of the irons, and the hissings of the blood against them must have made terrible scenes and surgery in those days must have been a horrid trade.
These terrible modes of arresting bleeding, prevailed for centuries.
The second mode of arresting Hemorrhage, and that is the Mechanical. The first of

Of these is compression.
The reading of pressure applied either above the artery, along its course or at the point where the blood ifses is a mode of arresting, which has been long in use and which although is not as much used as formerly, because we have better agents yet, still is of too much value to be given up.
In cases where the artery is small or where there is a bleeding surface from which there is a general oozing without being able to detect the mouth of the artery the the application of a compress will generally arrest the bleeding

If the vessel which is wounded is of some size, but situated over a bone there it affords a firm support and a compress may act upon it so as to bring the two sides together & arrest the flow of blood in its channel.

Compression is also indicated in cases where the vessel is so deep seated that it would be difficult to reach it without cutting through important parts.

In some cases the ends of the fingers, have been used in wounds when it was difficult to assist the haemorrhage, in. Then assistants were employed who relieved each other when fatigued and

others lives have been saved.

Various modes have been invented for compressing wounded vessels the best of these is the Tourniquet. This is one of the most valuable instruments ever invented by the surgeon. In fact before its invention there was much delay in surgery.

The limbs in operations were compressed by the hands of the assistants of course in the struggle of the patient much blood was necessarily lost, of course surgeons were deterred from many operations and it was common in practice to permit a gangrenous limb to go through all the stages of decay until it was ready

separated from the body when the surgeon ventured to remove it.
But in 1718 P L Petit invented the Tourniquet.
But you may be suddenly called to a case in which you have no Tourniquet what are you to do then? In those cases you must resort to the original Tourniquet invented by Ellard in 1674 and was used by him at the siege of Bezasucow, a ligature or broad tape being passed around the limb its ends tied, and then twisted nearly on the same principal of the common tourniquet, in putting on this band of hemp, you may use your handkerchief in cases of sudden emergency

twisting a small stick in it to cause the compression.
But there is one objection to this mode of compression, that the necessarily result is that the whole circumference of the limb is cramped and twisted. The return circulation interrupted the part becomes longer with blood, of course if it is in an amputation or operation there is more blood lost than any need for. Hence there have been various appliances proposed for arresting the arterial circulation in the main trunks and permit the venous circulation to pass uninterruptedly.
To fulfill these indications some

Surgeons use pressure with the fingers on the course of the artery or to use a key or some hard substance to press directly on it.
But these modes of compression are only temporary in their character, the objections to circular compression are that it suspends the circulation so as to cause danger of gangrene, which has occurred in some cases, from too tight and too long a, use of the tourniquet besides it is attended with a great deal of pain, few patients can bear its application sufficient length of time to be certain of its controlling the Hemorrhage, which when

The compression is removed when afresh.

From this review of Suppressing Hæmorrhage it is evident that there was little or no need for additional aid, this will be found in that admirable invention of the Ligature. It is most generally admitted that the credit of inventing this mode is due to Ambroise Paré, of all the various modes of arresting Hæmorrhage, this is the most safe and certain, to consider what substances are used to make Ligatures, those most widely preferred are thread or silk, but another material has been brought

ested by Dr Physic called the animal Ligature cat gut or buck Skin.
Then he also suggested an metallic Ligature which have been successfully tried and found to be useful. Now let us consider the Rules of Practice in applying Ligatures to arteries. Rule the first apply the Ligature itself, insulated from the surrounding tissues. This is a principal which should be much insisted on because if much of the surrounding parts intwisted within the Ligature it entirely decays and the Ligature becomes loose and does not close the vessel entirely and dangerous Hemmorhage may result.

It is therefore better surgery not to enclose within the Ligature more of the surrounding tissues than can properly be avoided but should as a Rule be confined to the calibre of the artery.

But in some cases you cannot isolate an artery? Then you may pass an armed needle, through the flesh surrounding the whole vessel and bring it, around it including some of the surrounding maps within the Ligature.

Another Rule of still greater practical importance than the foregoing, is to tie both ends of the bleeding vessel.

In many cases the hemorrhage comes not only from the ends of the wounded artery nearest the heart, but also of the lower portion, this is probably apt to occur in the arm and fore arm and in the parts where there is a free inosculation between the vessel in these cases it is obviously important to tie both ends of the divided vessel.
Should this be done if there is no bleeding from the lower end of the artery? You should by all means do so because although there may be no bleeding at the time, yet when reaction takes place there may be bleeding, which will be

very troublesome and even fatal in some cases.

But suppose the artery is only partially divided how are you to act then? In this case it is still more necessary to tie the artery both above and below the wound in its calibre, for this kind of injury is in a less favorable condition than if it were entirely divided because if an artery is completely divided its end retract within the sheath and the end contract, and this retraction and contraction of the artery are the two principal modes in which Hæmorrhage is arrested naturally.

But if an artery is not divided it cannot retract or contract it remains gaping and driving out the blood untill the action of the heart is arrested by syncope.

It is a fact which should not be overlooked, that partial wounds of arteries, particularly in punctured wounds, may be cured by pressure, and a spontaneous cure may be the result and still the artery may remain pervious to the course of the blood, but such cases are rare and still more so for a cure to take place without an obliteration of the artery which is the more usual termination.

When called to cases of this kind if

you have difficulty in finding the vessel then it may be necessary to cut down and tie the main trunk. But as it is a very serious and difficult operation, you should consider well all the circumstances of the case before you cut down.

Now whether is it best to cut down and tie the main artery above the wound and find the divided ends of the bleeding vessel?

It is much the more certain mode of arresting hemorrhage to cut down at once to the bleeding vessel on large the wound and sponge out the clotted blood, when you will generally find the artery

gives forth the blood at the wounded orifice. Then you can secure it with a needle and ligature; but it is important to make the effort as soon as you are called to a patient for after a short time the parts become so congested with blood which effuses into the neighboring tissues, that it is very difficult to find the point from where the blood issues. In your efforts to find the artery you will always take care to place a tourniquet above the artery so as you can enlarge your incission. You may have the Hemorrhage under control you direct an intelligent assistant

from time to time to relax the tourniquet and then the artery from which the blood issues will be readily discerned. In this mode you will be certain to find the artery, but remember to tie both ends. But if you cut down and tie the main trunk of the artery, you may not be able to arrest the Hemorrhage, for of course you may not exclude the lower ligice effectually by the course and hence such are the free inosculations between different parts of the arterial system particularly in the limbs in which wounds are most

apt to occur that there will be persistance of the bleeding, notwithstanding you have tied the main trunk.
Besides the hemmorhage from arteries there is also a great deal of blood poured out from the large veins of the part we know it is from a vein by it being of a dark colour and not being thrown out by a jet.
There is also great danger from venous bleeding, patients may die from a certain quantity of blood whether from the veins or arteries.
Now an interesting question comes up; are you to apply a ligature to

a vein when it is bleeding? This is a point of great practical importance, A distinguished army surgeon says, if these vessels are within reach, and pouring out their blood profusedly, I should not hesitate to tie them?

But at the same time he gives a caution, for he says I believe there are few army surgeons of the present day! Who would be as ready to applying a Ligature to a vein? or to an artery under these circumstances...

I submit these very improper observations on Hæmorrhage. To the candor and indulgence of Faculty.

The noble science of Obstetrics has been thought unworthy of cultivation by the scientific and literary mind. not only this, but in the mean and disdainful estimation of the innovations it has been scornfully looked upon as "an art foreign to the habits of Gentlemen of an enlarged academical education." I would say to such as have thus shown themselves by their contumelious and scurrilous innuendoes to sarcastic ridicule, that they might as well try to stop the monotonous movement of time, or call to the fair and bright celestial promenaders of the celestial regions to move from their orbs, as to impede the arduous exercises or onward progress of a profession so intimately connected with the sufferings and dearest interests of afflicted humanity.

When the accoucheur is summoned to a woman in labor he should obey the call as speedily as possible, taking care to provide himself with such medicines and instruments as any emergency of the case might demand. If he be in the country following the noble pursuits of his profession it will be safe and often necessary for him to carry the forceps, a female catheter, some tinct. opii, ergot, efficient medicines, and an ordinary sized syringe. The forceps can be safely left at home, for their use is but very rarely required, and when required, can be sent for and received in sufficient time [illegible]. He should always see a [illegible] that the patient be informed of his arrival, for I am sure it would be [illegible]

imprudent for him to be ushered into her chamber without her being in possession of it. Under such circumstances, particularly if she be a stranger, he might innocently and ignorantly commit an offence by his sudden and unexpected appearance which might prove sufficient to interrupt, or even prevent a cessation to the progress of labor for hours. In considering her condition we should find the pains returning with increasing frequency and activity, it is important in such a hesitation that she should be approached with becoming delicacy and right, in the but gently urge the propriety of an examination previous to giving it. For this purpose and that of delivery, she should be placed on her left side with her legs near the

edge of the bed and the knees drawn up toward the abdomen. The index finger being previously anointed with some unctious substance, we are to await for the occurrence of a pain, and let it occupy both pain and interval — provided the interval be not too long.
It should be passed along the perineum into the orifice of the vagina, then directed upward and backward toward the promontory of the sacrum until the os uteri or the presenting part be found. Any part of the child that may present has its own peculiar characteristic marks by which alone the presentation is recognized, and the position ascertained.
But the natural and most frequent of all presentations is what has been called that of the vertex, which may be and is

known to the accoucheur by its firmness, its hardness by the sutures and fontanelles. If the labor be found fully far advanced the os uteri will be found more or less dilated, the membranes protruding and rendered tense during the pains, all of which give place to a placid yielding softness during the absence of uterine action. In truth, the knowledge obtained by or during this examination is in a manner indispensable; for by it we ascertain whether the patient be really pregnant; if so, whether she be in labor and at full term; whether the membranes have ruptured or not; how the child is presenting, as well as the condition of the os uteri, vagina and perineum. Advantage may also be taken of this opportunity to ascertain the capacity of the pelvis, and other circum-

stances which may influence the duration or progress of the labor.

In most cases the accoucheur is summoned in the first stage of the labor which is the longest and most distressing both to him and the patient.

Should he deem it expedient to make an examination at an early period, he should be sparing of promises, and then withdraw from her chamber, for there is always a frequent desire on the part of the patient to evacuate the bladder and rectum, but should nature fail to perform this part of the work, and we should find her costive and the bladder distended with urine, some mild purgative medicine [illegible] be required to be given, and the catheter introduced. At this period the pains will mostly be found short, weak, and at

long intervals; during which intervals the patient will sometimes fall into a doze and obtain a refreshing slumber, but as the pains return she is roused from her delicious state of oblivion and repose to a fearful consciousness of the trials she has to undergo. The mind sometimes becoming anxious, irritable, fearful and full of gloom, anticipation and in addition to this, she invariably has the irritability of bladder and rectum with slight rigors, [illegible] times, nausea and vomiting, with a glary discharge from the vagina, which latter towards the termination of this stage becomes streaked with blood. The sharp cutting pains that attend this stage, and which the patient is compelled to endure, have been termed grinders; their object being, in itself, to prepare the child and the passages for delivery.

As they gradually increase in duration and frequency the membranes give way, the liquor amnii escapes, the head comes passes through the os uteri and the labor enters upon the second stage, when another examination should be made for the purpose of ascertaining more accurately the nature of the presentation and position. The phenomena are now somewhat changed; the pains assume an expulsive character, they become more frequent, their duration longer the intervals shorter and the suffering greater; in all, the fatiguing efforts, violent, painful and exhausting struggles of the poor patient; her expressions, moans, outcrys and respiration are in the sole height, pathognomonic to one accustomed eye of the stage and process, and of what will or aught to soon take place.

The mind now by judicious management and degrees acquires courage, firmness and resolution, while the voluntary efforts are confined to violent grasping and pulling the hands of bystanders, and with this the muscels of the extremities, back and abdomen are called to aid in the struggle, until at length the forces conquer all resistance and in the acme of a violent expulsive effort and with an outcry of agony the exit is effected. Before this occurs, or when the head is beginning to force open and extend the structures at the outlet of the pelvis the attendant will be required to take a firm seat, the bed clothes and lay, and finally pressure the organs, in direction to the fingers, to avoid the injury of the hand, which might and too often does occur for the sake of delicacy and necessity the operator.

As soon as the head is born it must be received and supported with the hand, the face cleansed, and an examination made of the neck. All in the room are sometimes informed and cheered of it being alive by an audable squall. It sometimes happens that a fold or more of the cord is found surrounding the neck, which may be gently drawn down by making the traction on the placental extremity, and passed over the head, or the loop may be left included with the fingers until the shoulders allow it to pass through it. If either of the modes of relief fail, the effected shoulder may be seized and the delivery effected as promptly as possible, by hooking the fingers in the axillae. While this is being done, an assistant should be directed to use moderate pressure and friction over the

uterus, to stimulate it to contract, and thus avoid hemorrhage. Should hemorrhage occur, the most active and efficient means we have at command should be employed without delay; such as lowering the head, elevating the pelvis, brisk friction over the region of the uterus, grasping the uterus through the abdominal parietes, and by the application of cold to the abdomen and vulva.

Among the most reliable and effectual of internal remedies is ergot, and a combination of acetate of lead & opium and ipecac. The object of these and a number of others is to make the uterus contract, so that the orifices of the uterine vessels may be closed speedily as possible. The patient must be kept in the recumbent position, and if syncope occurs the head is to be lowered, the feet elevated

so as to allow the blood to flow to the brain. Stimulants must also be administered and the room kept cool and well venti-lated. But supposing this unfavorable occurrence not to be present, an interval of short and variable duration will usually elapse after the expulsion of the head until the recurrence of the pains that are to expell the shoulders, trunk, and feet, which in most all instances is attended with less suffering, while the expulsion is more easily and rapidly effected. While the shoulders are passing the perine um will require some protection, after which the foetal body is required to be di-rected a little forward so as to correspond with the axis of the pelvic outlet.

It is then to be received into the hands and very slowly, gently, and carefully removed to the extent of four or five inches

from the mother's body, and withdrawn from beneath the bed clothes, and placed at her side on a warm cloth. In the meantime the mother's person should be kept perfectly covered and concealed.

When respiration is established, and the pulsations of the cord have ceased, or become very languid towards the placental extremity, the ligature is to be applied an inch and a half or two inches from the umbilicus, and drawn sufficiently tight to prevent bleeding. The cord should then be cut by a pair of scissors, a quarter or half inch from the outside of the ligature.

I learn that it is the opinion and practice of many not to apply two ligatures except there be twins. Here if two are be employed the quantity of blood that would likely be discharged would unquestionably jeopardize the life of the

one in the uterus. On the other hand, when there is a single foetus, and but one ligature is employed, it is thought by allowing the blood to escape to favor the contraction of the uterus, and expulsion of the placenta — if the blood discharged does soil the linens, &c. — soon as the cord has been secured by the application of a ligature (or ligatures) the child should be enveloped in the warm cloth upon which it was laid and given to one of the most careful of the attendant matrons to be washed, while the hand should be placed upon the abdomen for the purpose of ascertaining whether there be another child in the uterus, and also whether the placenta is retained or has made its escape into the vaginal cavity. Subsequent to this necessary and careful manipulation the attention is to

be directed to dressing the navel, the object of which is to prevent this putrefying mass from coming in contact with, and excoriating the sound skin.
It should therefore be passed through a small hole in the centre of a piece of linen, seven or eight inches long, and about four broad. I think the cole sheet made, and rendered less irritating by folding the linen so that it will be half the dimensions given: then cutting a well angular piece off of one corner, and holding it near the bottom of the flame of a good tallow candle, so that the cut edges may become a little scorched and greased. After this is done, it is to be placed in the hole of the cord, and the cord, passed through the hole and laid into its proper place, and carefully into the linen as

The inferior portion of the linen is now to be folded over the cord; care being taken that the fold extends below its insertion, and afterward folded laterally, so that it is perfectly enveloped.

The whole is then secured by a broad bandage, after which the good old matrons dress the little strangers as their fancy may direct. If it is the unfortunate and sometimes hopeless condition of the helpless little infant to be born in a state of asphyxia, the most prompt, active, and efficient resuscitating means should be resorted to without delay, such as the removal of mucus from the mouth, fauces and upper part of the trachea, dashing of cold spirits over the thorax, applying the mouth to that of the child's and expiring, then expelling it by gentle pressure upon the thorax, or where there is reason to suspect

the existence of a large quantity of mucous secretions in the air passages, it should be held, with its pelvis elevated, mouth and abdomen downward as if it were lying on an inclined plane, at the same time gently shaking it, so as to clear out the trachea, and thus facilitate the introduction of air into the lungs.

The warm bath, and dry warmth as an application have also proved effectual.

Fortunately for the rapid increase of population, and for the refutation of gloomy physicians, which is so easily [illegible] and lost, this is of comparative rare occurrence. After discharging the necessary duties to the child, and exercising the due care, attention, and gentleness its delicate structures require, we finally leave it tranquillize and rest on the breast or in the arms of the nurse, manifesting some desire to take nourishment.

or very feeble and breathing with difficulty, or we may after trying our efforts in vain to establish respiration leave it a corpse.

The next duty required of the accoucheur is the removal of the placenta. This may be found in the cavity of the vagina, in the uterus or lying at the vulva. If it in a number of cases it will not be found at the vulva, and when such is not the favorable termination of the labor an interval of ten or fifteen minutes usually elapses during or after which pains of a somewhat different character occur, by which its detachment and expulsion through or into the vaginal cavity is effected. If it be in the cavity of the uterus the funis umbilicalis may be twisted two or three times around the first and second fingers of one hand, and slowly yet gently fended like traction made in a time lasting about

the contents, or as I have been advised, the thumb and first two fingers of one hand may be carefully introduced into the vagina, where they may grasp the mass below them, and gently squeeze it, after which give it several twists so as to twist the membranes that they may come away too, when it should be slowly and carefully extracted. Some one of the kind old ladies will most likely standing near by, anxiously and patiently waiting to offer their services by holding the chamber or some other receptacle for the accoucheur to deposit it in. I find that and save it all, and that it will not require further examination, the hands must be washed, and the abdomen examined in order that we may see whether the uterus is contracted or not.

This will be easily determined by the hardness and size which it communicates to the hand. When such is the case the soothing influence of sympathy and glad-dispelling words of congratulation, with the assurance that such is the successful termination of her suffering, will be willingly listened to and gladly received.

On the other hand, should the uterus be found large, soft, and yielding to pressure, brisk friction with the open hand, and the grasping pressure with the fingers should be made, by which manipulation the uterus will be stimulated to contract, and finally close the patulous orifices of the uterine vessels. After the placenta has been removed, and the condition of the uterus ascertained, the mid-wife and other

parts that have become soiled, should be carefully washed, dried, and covered with warm napkins, which must be renewed as occasions require.

The broad bandage is then to be passed under her vest to the skin, and so applied as to extend from the pubes to the ensiform cartilage, and drawn sufficiently tight to afford the necessary support to the uterus and abdominal viscera. Her vest should be removed from her, and she should be kept comfortably warm, and perfectly quiet, with the head but slightly elevated until she has recovered sufficient strength. The proper time arrived for her to be made comfortable in bed. Before this time has arrived, most women, with the exception of primiparae, will complain of and often continue to be troubled with

a succession of painful contractions which have received the title of after pains, the presence and operation of which is said to be salutary within certain limits, as they present the advantage diminishing the size of the uterus and expelling its contents. When they are severe and interrupt the repose of the exhausted woman, they can, and may be diminished by small doses of camphor and opium. If there be milk in the mother's breast nothing can be more favorable to the dictates of reason and nature than an early application of the infant to the breast, for no artificial means or substitute that we can employ can be superior or even equal to the wise provision of nature. By this the uterus will be induced to contract, and the child procure from the earliest period some saline fluids which

have, or exert a favorable influence on its delicate digestive organs.
But should the mother have no milk, it may be allowed a little cow's milk diluted with water, to which may be added a small quantity of loaf sugar.
A period of temporary constipation generally follows labor, for which if there be no positive contra-indications, and the tongue is brown, furred, or of a yellowish green, the mouth bitter and clammy, and there is loss of appetite, mild purgatives are demanded; such as Cleaver's Revivi and Seidlitz waters.
Fearing that she may think herself neglected, every little attention and admonition should be directed to and for her general comfort and condition that kindness and sympathy, can be the means of affording.

Her diet should be of the mildest character, and of easy digestion, consisting principally of farinaceous articles. In conclusion she should continue in the recumbent posture perfectly quiet and composed until her organs have nearly resumed their normal functions, and the system in general recovered sufficient strength and tone for the lightest exercise, for many, long, and painful are the evils consequent on premature exertion and exposure.

An Inaugural Dissertation

on Abortion

Submitted to the Council

of the

Medical Department of the

University of Maryland

for the

Degree of Doctor of Medicine

By

Lewis Mitchell

Baltimore Maryland

A.D. 1859.

Introduction.

The time has [illegible] when [illegible] should [illegible] to [illegible] enter the [illegible] against a foe, to be combat with [illegible] and death.

She has [illegible] chains [illegible] forever, she has [illegible] on their [illegible], and [illegible] with which, [illegible] offspring [illegible] of their fathers, the [illegible] of [illegible] [illegible] endeavored to [illegible] [illegible] people, what will [illegible] and [illegible] them in the [illegible] of liberty? [illegible] the [illegible] and [illegible] on the [illegible] rebel, what will [illegible] [illegible] will be [illegible], with [illegible] that land [illegible], with [illegible] for [illegible].

Upon it the most careless and unthinking
the moment must be a solemn one, when
he goes forth, pledged not to fly, but to persist
even against death, and with God for and
for a way of escape. He sees life and
death set before him as his reward, the motive
of perseverance, he which follows him
beyond the life, even unto the throne of God.
A great sense of responsibility must perse-
vere. God assured by the first words
of those who have known the power of life
here, and having hitherto, that unavailable
exertions, have ever are always ready to
his position and take all risks, it still remains
nothing to be disposed towards, he feels the
self confidence of a life energy which will
support him through scenes, what he must
decide. Before proceeding to the subject of
my discourse I will simply state, that should
any communication with the Missionary be

closed in the spring. I will say nothing more, now, but, the great, important subject connected with its halls.

The great difficulty under which all labors in writing a thesis, is that, from want of practical experience it must be a mere compilation of the ideas of other skilled in his own profession. I am indebted for the aid received from the professors of Wistar, and from books. I am conscious that on the importance of this thesis, by several excellent lectures on the subject of dissection, delivered by Dr. Mitchell at the Medical Institute.

Dissection

Q. Dissections may be defined to be the separation from the mortal organs of the product of corruption, poisons to the food

of [illegible]ity. In [illegible], where the chance of fertility might be affected by the heat of the sun, [illegible] period of [illegible] [illegible] at the length [illegible] we have, for the sake of convenience, [illegible] the same period, but it is not fixed by law. It is a strange fact of nature, [illegible] seems most likely to be [illegible] than at the equinoxes.

According to Aristotle [illegible], abortions were made [illegible] [illegible] tom. These tables were known made [illegible] in large cities, where the temptation to [illegible] abortion is much greater, and the means of accomplishing it more easily obtained. There is no such distinction [illegible] rule, in this country, but the [illegible] [illegible] number [illegible].

M. Gallimard, in a recent article on the subject, makes three varieties of abortion, viz. when previous to the twentieth day of pregnancy, when before the third month, and later, from the latter date up to the tenth month of gestation.

Abortions are much more frequent about the second and third months, and are especially apt to occur, at the menstrual period, owing to the influence of habit, which exists so great an influence over all the functions of the body. There is an attempt, at that menstrual period, to set up the second after the whole genital apparatus is congested, and of course, there is a great tendency to hemorrhage.

Abortion may be primarily divided into natural, and artificial. Natural, when it takes place without human, artificial, when it is brought about, either by the mother

to excessive exposure and fatigue, often by the polygamous mode of life adopted.

Natural abortion may be divided, in respect to its causes, into spontaneous, and accidental. The causes of spontaneous abortion are either maternal, ovular, or fœtal.

With regard to the mother the most frequent cause is feebleness of the system from chronic congestion, lessening the great tendency to abortion, is likely to result. The next most frequent predisposing cause is previous abortions. Here again the great influence of habit comes into play. The woman who miscarries frequently will generally be subject to the same evil on each pregnancy. The frequency of abortion in the Lucknow city, by means of rest, quiet, and even carry one patient out the dangerous period, she will usually carry the child to term. Debility is a predisposing cause of abortion it acts by interfering with the functions of

of the joints & muscles, and at times undoubtedly are apt to be more and more, and therefore liable to be dangerously affected by moral conditions. Acute diseases especially the complex fevers, and also all small pox, according to the course of patients, are apt to be more or less mischievous. Syphilitic and gonorrhoeal influence are the proximate causes.

Considering by the good effects of the good systems which the season may produce, when Illinois legislature practically adopts with gratitude. Exercise & diet are not a positive cause, by bringing up to much experiment in the school. It is well known that possibilities merely are a false & hopelessly strong moral and conspicuous contable constitution, may produce as the most causing.

Cases relating to the organs of digestion, which tends to cause the disfigurement of the organs

may cause by inflation. Headache, that of fine fever especially small pox should be received small pox from the patte or the woman having gonorrhoea, the eyelids may not be a indication of the infection in the case. A case is related by Dr Gaussel illustrating or proving the fact & showing an epidemic of small pox, preceded uncomfortable sensations and pelt headed more with redness, fifteen days before delivery. The infant was born with a violent fever in full suppuration.

Remember is another and the most frequent of the causes which directly affect the woman. Pus may take place either between the Uterus and placenta, or into the substance of the placenta itself. The latter is called placental suppuration. Death forms not by inflammation or suppuration of the entire placental mass.

Githa respecting the fluids entirely, and interfering with the nutrition and respiration of the foetus, that it dies.

The ~~infant~~ foetus may be affected secondarily through the father or mother. Suppose that one or both had syphilis, the child would be born with the general taint.

With regard to the father, the great cause of abortion is syphilis. It is the belief of some writers that syphilis, transmitted from a hard chancre, is often so entirely isolated from the system. It poisons all of a man's nutrition and among the rest the [illegible] supplies the [illegible] through the nutrition, and secondarily through the mother.

[illegible] of facts on the subject [illegible] [illegible] to [illegible].

[illegible] the [illegible] that have been considered as false facts, but which

might and probably be found, although upon it, above all, many other causes which are often called accidental causes, they do cause premature abortion. These causes do not act on the woman herself but act upon the unborn child and produce a more or less effect. Facts of a painful or shocking character, of a high order, have resulted from the above action of the parts, causing a variety of human positions different from the natural position.

The accidental causes are either physical or mental. By the physical I allude to such actions as the sight of death and blood may result in abortion from sympathy shown on the mother's part by directly causing a falling child to be born, or from receiving such a shock as to be premature.

A woman from meeting or hearing the walking in the dark, although the above

violently against a little. The motions of the child were for a time very pleasant, but diminished, and by the morning they could not be perceived at all. Two days after she was delivered of a dead foetus, which presented on coming out the back part of the head.

A fall or blow may detach a part of the placenta, thus producing a separation of the child and, the following, other causes, should coming on suddenly and violently, may be put down as causes.

Some women are so frightened at the sudden, may start from the lightest mental cause; others will bear the most violent of grief or mental shock without being affected with the course of gestation.

In addition to the long list of causes mentioned, there are certain specific causes which have relation to original [illegible]

and comprise all the material and complete which are used to bring about parturition.

The symptoms of abortion with the period of its occurrence and the usual prodromata at during the early months of gestation, or some ill-defined phenomena are exhibited. The patient suffers but little more than in ordinary dysmenorrhea. The collapse is feeble, and the uterine sinus may be a clot of blood rather than a fetus. The woman often thinks that her menses having been postponed, after the flow is more painful and abundant than usual.

At a later period, when abortion results from bad health of the mother or from chronic disease, the following premonitory symptoms may generally be observed — shivings succeeded by heat, nausea, thirst, uneasiness, headache, pain of the extremities, low spirits, coldness, and expectation settled at the pubes, pelvis and back, which accompanied then and soon on the loins

[illegible] of the [illegible] in the [illegible] of the [illegible] and [illegible] occur in the abortion, the [illegible] [illegible] pain [illegible] and [illegible] around in the hypogastrium. The uterus [illegible] the uterus may be felt to harden at each pain.

The [illegible] for [illegible] usually a [illegible] dilatation or dilatation [illegible] with the [illegible] the membranes [illegible], are ruptured, the [illegible] is expelled, and followed by the membranes.

When the result of [illegible] the [illegible] is immediately expelled. A woman may fall, after losing, the [illegible] by death from [illegible] blood, the uterus [illegible] expelled with a quantity of blood. This [illegible] occurs frequently at an early period of gestation.

It is [illegible] that there is usually an interval between the accident and the commencement of abortion. The phenomena differ according to whether the injury was inflicted on the [illegible]

is directly upon the child [illegible] the woman experiences a sharp pain in the abdomen. After a few days, when the pain has diminished, a small [illegible] followed by [illegible] [illegible] slightly dilated, and with bearing down blood takes place, and if not arrested [illegible] is expelled as usual.

When the foetus actually passed, after [illegible] by [illegible] [illegible] the [illegible] terms the foetus [illegible] [illegible] its [illegible] expulsion. After a few days the woman [illegible] to feel [illegible] [illegible] as usual. Within a few days [illegible] the child begins to [illegible] [illegible] [illegible]. The child is [illegible] [illegible] the [illegible] [illegible] have [illegible] the patient [illegible] [illegible] of [illegible] [illegible] [illegible]

sickness bears her, the swelling of the breasts subsides, and the feeling constitutional is entirely ceased. The fœtus is now a foreign body, which, violating the sterility of the uterus, it destroys and expels it; but if it be not so, the dead fœtus would be [illegible]. It is hence generally expelled after the 8th day.

After either after the death of the fœtus, or after some remarkable phenomena, by which some what advanced, everything goes on as if the fœtus had been expelled with the exception of the discharge of the lochia. The phenomena of the fœtus were noticed; the total result of [illegible], the breasts the [illegible], and the usual order is resumed.

The retention of a dead fœtus is the cause of no danger to the mother as long as the membranes are intact, for when these are ruptured the fœtus undergoes putrefactive and dangerous symptoms [illegible]

[illegible] force is not sufficient to [illegible]

Dark fluid liquid, [illegible] dark [illegible] particles, escapes from the uterus. [illegible] the contractions of the uterus [illegible] [illegible] [illegible] the woman must die.

In the diagnosis of abortion it is necessary to determine, first whether or not the woman is pregnant, secondly if pregnant whether she has to deal with simple uterine congestion, incomplete abortion, or complete abortion, and finally the date of the abortion, or the period.

It is impossible to decide definitely the fact of pregnancy from natural signs only, therefore it cannot be fully determined before the end of the fourth month. Suppose that a woman has been menstruated for three or four months, owing to the relaxation of the pelvic tissues is some enlargement of the abdomen, the breasts being [illegible] [illegible] [illegible] in fact the [illegible] usual of the [illegible]

[illegible] of [illegible] symptoms of [illegible] congestion effusion, there is a [illegible] of blood. Shall the symptoms be [illegible] to the [illegible] of the disease, or to [illegible] alteration in the form of [illegible] and [illegible] of [illegible] [illegible] [illegible]

between a clot of blood and an ovum.

Suppose that pregnancy has been determined to exist, and the symptoms be considered as those of simple uterine congestion, or as indicating a threatening abortion. The diagnosis would with great difficulty, during the early months, but it would of total importance, since upon the same treatment would depend the life or death of the child.

After the symptoms have subsided, or have subsided by treatment, it is impossible to tell what organic lesion, if any, existed in the uterus. Polypoid tumors may have been lately cut in twain, or so undermined with the protective and nutrient vessels of the foetus, from being cured or perhaps the child may have died a time before the pregnancy with regard to the results would be viewed in such cases. Lastly — if abortion has commenced, its progress be arrested? If so, what is the process and the symptoms indicated, when it

good ground for hope. [illegible] the head, strong
of pains, [illegible] from [illegible] uterus, [illegible]
hemorrhage, os dilated and membranes protruding. All
these promised unfavorably, yet they have all
yielded to proper treatment. According to some
writers, even the rupture of the membranes and the
escape of the amniotic fluid do not [illegible]
[illegible] inevitable. It is probable that such ex-
tremes were based on mistakes in diagnosis.

Action is absolutely [illegible] only when
the foetus is dead, or when so many of the
utero-placental vessels are ruptured, that the mother
is not able to supply the foetal [illegible] and
respiration. In estimating the injury and both the
vascular connexion, more important is to be
ascribed to the amount, than to the character
of the flow. A profuse and long continued flow
might result from the rupture of any first vessel,
but a large amount but gradually [illegible] indicates
that the placenta is separated to [illegible]

as to render abortion almost inevitable.

Being the only case in which the death of the fœtus embryo cannot be determined with certainty, the cessation of all the unequivocal signs of pregnancy, as nausea, vomiting, &c. and the non-growth of the patient are the best indications of the fact.

When from a consideration of the general, local and sympathetic, we have reason to think that the child is living, we should put off the act of the death, and endeavour to avert the progress of the event. If we succeeded, perhaps the dangers of abortion would not exist. The child being more developed, the fœtus would be relieved of the act, and there is a greater chance of life.

The diagnosis can be made with certainty of the death of the fœtus can be ascertained. This may be done by means of the following signs — the cessation of pain and motion. The general shrink, there is a sense of dragging, bearing down

and a feeling of cold sweat might be the first symptom, which rolls about from the more bare part of the body. If the movements of the fœtus be violent, they cease. Finally the attendants feel the last instant of the death of the fœtus, for if the sound of the fœtal heart is not heard by the fifth month, or having been heard, it ceases, it is almost universal sign of the death of the child. All the other signs may be fallacious. This most important help to diagnosis is not available until near the end of the fourth month.

The prognosis varies with the time of the pregnancy, the time of its occurrence and the cause producing it. To the child it is of more fatal. To the mother the prognosis is found to be more serious than that of labor. This is not true with regard to the immediate consequences, which are less dangerous than those of labor, but the remote are much more serious. The abortion predisposes to another, the fœtus is born

There are shocks that stress of labor, always in a woman, accustomed to easier, suffers more than terms in a given time, as fully equal to natural labors, for this reason. Second labors would be more likely to suffer. Besides the shock of a tortuous, exists a depressing influence over the mind of a woman. Painful disappointment and fear of tortuous labor would be and must be anticipated.

The period at which abortion occurs will vary the pregnancy. During the first and second months, owing to the feebleness of the attachment of the placenta to the uterus, the expulsion of the ovum merely constitutes a menstrual period. It is more dangerous about the third and fourth months, when at any rate the placenta only has been partly formed. The rapid size of the embryo requires an extension of the uterus and the capacity of the os which has made great use of the necessary dilatation

[illegible]

[illegible] abortion at [illegible]

labor at term. [illegible]

with the cords [illegible]

an artificial abortion; what [illegible]

[illegible] is attended with the least [illegible]

[illegible] the cause of [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

come away unassisted

[illegible]

[illegible]

[illegible]

continuing to do so? Treatment must be adapted during the foregoing [illegible] gestation. The foetal [illegible] must be looked for and treated if possible. If plethora be the cause suspected, bleeding, saline cathartics, [illegible] may ward off the patient's fatal [illegible]. The system must be built up by means of nutritious [illegible] nutritious food, and exercise, the functions of digestion, [illegible] must be put in a sound state. All [illegible] disturbances of feeding must be avoided. Should [illegible] be the suspected case, the woman should be [illegible] for a [illegible] length, and the [illegible] [illegible] and [illegible] [illegible] called [illegible] from [illegible] of blood before the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] condition of the mother should be [illegible]. [illegible] [illegible] [illegible] [illegible]

course of acute disease. What are the best means to prevent this accident? Of course the disease should be subdued as soon as possible. At the other extreme cases seemed to be that abortion resulted not so much from the disease as from the remedies used to suppress it; hence they advised that only the strictest treatment should be established that are as now known to be the disease itself, when fearless measures, it is obvious that the sooner it is subdued the less chance there is of the accident occurring.

Delirium the existence of pregnancy in a patient, would not modify the treatment of the disease except that any antimetics should not be used, but the vomiting be prevented from the return to the stomach violent cases should also be avoided, because of the unknown other ills they may do.

When a woman is on the point of

at the usual period of delivery and of no importance, cannot be observed except the fetal influence of habit, although for some time before the usual period of parturition, and for several weeks after the time has gone by, the fetal pulse, in the vessels, feature, or a little of favorable confined to the dull or blunting effusion of excitement. In this way she will, the be brought safely to bed.

Dr. Bell refers that, after all, effects to the working or action of treatment.

There are changes, pain in the back extending around to the hypogastrium and bring uterine contractions appear. The os uteri dilates somewhat, and there is some discharge of blood. The treatment will depend on the symptoms, and the condition of the woman. The death of the fetus can be absolutely determined at a time

to let things take their course, only protecting the patient against the loss of too much blood. Even if we have the slightest reason to think so at first, we must endeavour to arrest the progress of the accident if possible.

When the hemorrhage is slight, and pains not intense and so unbearable, we may hope to prevent abortion. The woman should be placed, on a bed or sofa room, if actual bleeding from the arm is necessary. A large dose of opium should be given by the mouth, or rectum if perhaps better, in some soothing form, thus by the use of leeches may be thrown into the system. Hemostatic fomenting cold should be applied to the pelvis and hypogastrium, or the alternation of hot and cold to the lower region, ice should be introduced into the vagina.

If all these measures fail to arrest the hemorrhage and the dilatation and laceration

from the loss of blood, abortive forceps [illegible]
and measures must be taken to expedite the
expulsion of the ovum inasmuch that the
uterus may contract and close the mouth
of the bleeding vessels. Ergot should be
avoided for, in case of the [illegible]
repeated every fifteen minutes until the
specific action is manifested. Ergot is
given to assist in the expulsion of the
ovum, but if impossible to facilitate the
contractions of the uterus after it has
cast out of the ovum and after bathing
the bowels. Inhalations have proved
sometimes so valuable that it is impossible
to overrate its importance. The tampon
for the douche and D's should never
be used except when absolutely necessary,
and even then it should not be used except
unless the woman is exhausted by the
hemorrhage. It acts as bad tampons by exp-

supposing the external flow of blood thus forming its regulation, and by contact with the uterus, irritating that organ, and bringing on contractions. A hand kerchief may be used as a tampon, or, what is better, squares of rubber cloth strongly attached may be introduced. At a time until the vagina is filled, the tampon must be retained by a T bandage. The tampon may be saturated with an astringent solution.

Dangerous internal hemorrhage cannot take place before the eighth month unless the cell are inflamed as to admit of ulceration, but when it takes place as late as the fifth month and the tampon is used it must be taken for the accoucheur occasionally to, thus his hand on the uterine globe to see if it enlarges. The tampon should be left for one or eight hours. When

removed the ovum usually [illegible] out of

Some writers advise the rupture of the membranes instead of the injection of [illegible]. The rupture of the membranes is the means resorted to when it is necessary to bring on premature labour in consequence of dangerous hemorrhage. In this way both mother and child may be saved. But in placenta praevia [illegible] hemorrhage [illegible] be speedily arrested. But when the membranes are ruptured there may be some delay owing to want of contractile power or the feeble state of the uterus [illegible] may be expelled immediately, but the delivery of the secundines is often [illegible] difficult.

After the expulsion of the ovum has taken place, the uterus should be examined to see if it is contracting, and if not it should be rubbed for [illegible]

[illegible] During the first and second months the [illegible] is usually found enveloped in its membranes, but in abortion [illegible] the [illegible] construction [illegible] the [illegible] [illegible] the [illegible] [illegible] [illegible]

An
Inaugural Dissertation
on
Scarlet Fever
submitted to the examination of the
Provost, Regents & Faculty
of
Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
By

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Scarlatina has been known as a distinct disease only within a comparatively late period of time. Formerly it was considered as one of the varieties of rubeola & was first described as a separate disease in the year 1675 by Sydenham. After the last named writer contributed most to perfecting the knowledge which is now had of the disease. This disease is of a febrile and contagious nature characterized by an inflammation of the fauces, as well as by a scarlet rash which appears on the second day and disappears by desquamation on the sixth or seventh day. The disease has been divided into three varieties, viz. Scarlatina simplex, Scarlatina anginosa, and Scarlatina maligna. Though the particular group of symptoms indicative of each of these three varieties are sometimes observed in particular cases yet in other cases we find the symptoms so blended as not to admit of their classification under any one particular of the three varieties. And according to Dr Wood, there appears not to be much more reason for making distinct heads in the consideration of the

disease than for sodoring in other febrile derange-
ments, - particularly if in sodoring there is any danger
in being led to suppose the nature of the varieties is
different. This indeed is the same in all & all are
dependent upon the same causes. The modifications arise
from peculiarities of constitution, state of the system &
also the prevailing atmospheric, or epidemic influence -
I shall first speak in a general manner of the symp-
toms & cause of the disease, and afterwards will note
those symptoms, the greater violence of which distinguish
each variety - both with & without the ordinary preliminary sy-
mptoms of febrile affections. The disease is ushered in by a
quick pulse, intensely skin, flushed face, pain in the loins & anxie-
ty - thirst & vomiting are also usually present & most
frequently attended with diarrhoea. Sometimes there
is headache and other marks of nervous disorder
as great restlessness, delirium or a stupor -
There is great variety in the degree with
which each of the above symptoms are
manifested in different cases. The
characteristic rash appears on the second day

but sometimes sooner or later – It is first noticed on the face & neck and is from thence diffused over the whole body – The time occupied usually in the process is twenty-four hours – The manner of its diffusion is sometimes different beginning first in the extremities & spreading thence over the body – It first appears in small points which soon coalesce to form large patches with the whole surface has acquired a scarlet hue – In the milder cases however the whole surface is not covered but unaffected portions of skin intervene between the regular scarlet patches – With the scarlet hue there is generally no roughness only the whole thickness of the skin may be increased from its tumefied state, in exhilarment from any cause such as crying; coughing & the redness of the hue is increased – The redness will also disappear under pressure – Along with the rash a crop of miliary vesicles are not unfrequently observed on the neck in the axilla & at the bend of the elbow – The minute papillæ and papillæ [illegible] make their appearance in the declining stage –

The characteristic inflammation of the fauces comes on simultaneously with the commence of the fever or a short time afterwards. The inflammation is marked by redness & swelling which extends forwards over the entire surface of the mouth. The tongue being coated with fur, has projecting red papillæ from its surface. This inflammation of the fauces sometimes exists in a very moderate degree if at all, at other times it is one of the most prominent & dangerous symptoms extending in all directions from its primary seat & interfering materially with both respiration & deglutition. The fever does not abate at the appearance of the rash or the facial affection but continues throughout the whole progress of the disease with frequent exacerbations in the morning & with occasional delirium & comatose symptoms. The frequency of the pulse is disproportioned to the violence of the other febrile symptoms often amounting from 120 to 130 in a minute. The temperature of the skin is also very high attaining from 105 to 106 Fah, but it is

asserted to have reached 1132. The disease attains its height usually from the fifth to the ninth day & in favorable cases, from that time begins it decline by a gradual disappearance of all the enumerated symptoms. Sometimes the amendment is accompanied by a profuse perspiration or diarrhoea which may be regarded as critical. Desquamation usually commences with the decline of the eruption & is completed about the end of the second week. During that process, the cuticle peels off in small scales but sometimes in large flakes forming a perfect mould of the part from which it has been such is the case with that of feetus of a tender age of the foot. At this time say at the end of the second week the patient may be considered as well provided no untoward event has occured. But the whole course of the disease is beset with dangers. Thus the symptoms may lurk under the violence of the first attack, the nervous system not being able to stand the shock. If the patient is liable to be carried off at any period of

an attack on the same system to be followed by a permanent cerebral state. Again inflammation may seize on some vital organ and death result from cerebral plethora or pneumonic or disease of the stomach, bowels & kidneys may accomplish the same end, or the inflamation of the larynx may result in suffocation. Finally the patient may die from pure debility, the result of wasting discharges incident on the different local affections or ulceration & gangrene of the throat & other organs.

II. Scarlatina Simplex

This variety is characterized by the absence of the throat affection or its existence in a mild form as scarcely to be observable. It is the least dangerous of the three varieties & is frequently of so mild a form as scarcely to constitute the disease. The presence of the cutaneous rash & the accompanying fever are the essential characteristics.

III.

Scarlatina Anginosa.

This variety is characterized by the redness of the throat & affection, stiffness of the jaws, soreness of the throat & difficulty of deglutition are the prominent symptoms in the commencement of the complaint. The accompanying rash is usually later in making its appearance than in the simple variety usually making its appearance on the third instead of the second day. It is also not so general in its diffusion being sometimes confined to particular parts as one extremity & in many instances the rash disappears & again returns several times in succession. The accompanying fever is usually more violent than in cases of scarlatina simplex & has a greater tendency to delirium and stupor. The inflamation of the fauces advances with the progress of the disease extending forwards in to the nasal passages & larynx and backwards as far down as the eye can reach. Hoarseness is the result of its extension into the nasal passages. The patient often snores as though he had a guttural voice. And an effusion or exudation occasions the fauces sometimes stiff and

sometimes concrete. The surface beneath the exudation is sometimes only swollen and red at other times extremely in the advance stage ulceration & gangrene result. In this condition of the fauces deglutition is extremely difficult & respiration is often impeded with. By the progress of the inflammation the nasal passages are sometimes stopped and the patient forced to breathe from the mouth. In this condition an acrid discharge often flows from the nose excoriates the parts there about. A disagreeable and acrid secretion issues from the fauces much of which escapes down the pharynx & probably gives occasion to the irritation of the stomach & constipation so often accompanies this variety. The tongue is often for the first at urinary period & for some days dark & rough having fissures & fissures. There is also considerable swelling about the parotid & submaxillary glands & the glands are sometimes tender & inflamed. The accompanying fever is higher than in the simple variety & there is a pungent burning

to assume the typhoid character. Should there be much external suppuration or extensive sloughing from the repair necessary to be made by the wall caused by ulceration.

III.

Ulcerative Malignant

This is the most dangerous & violent of all the varieties either the simple or inflammatory assume the malignant character the appearance of the blood not being necessary for its establishment. In the most violent cases the system yields at the first shock & the symptoms soon apparent in these cases are those of some slight general inflammation with the pulse feeble & rapid, the surface of the body in one part cold in another perspiration clammy and face pale and livid. Effusion sometimes made towards recovery, and some fluid spots are seen as if oozing through the skin. But soon the powers of the system are sunk and both appearance in the second or third day from a

tops by reason of violence of the at-n of septic
reaction may take place and often prove to be fatal
ital — There is deleterious stupor fr the circulation
purpleish or dark tints — the septic, or putrid
vibrios) passive hemorrhage, involuntary urine
discharges & intes overcl, death in a few days In
other cases where there is greater energy of system & less volume
of the cause, the malignant character is not
so strongly marked — The symptoms which
indicate a malignant form are more intense
pain in the back and extremities, great
tendency to stupor, a later appearance of the
eruption & its tendency to a darker hue —
As the fever changes the symptoms they assume
a more marked malignant character indicated by
the very dark tinted skin irregular and pale appearance
of body, and the eruption covered with an excitable of
a darker or darker hue gangrenous sections to
ulcers form, the breath is fetid, stools
offensive and the tongue — blood issues
from the different mucous surfaces as the

gastro-intestinal & urinary exhausting diarrhoea
sets in & at length collapse comes on with sunken features
cold clammy skin fluttering pulse increasing stupor
sinking until death towards the close of first or second
week - Sometimes convalescence takes place even in
this form of the disease, but it is slow and
leaves from the vital energy left in
the system & the nervous respiratory be made
Another variety of Typhoid is mentioned in
which all the symptoms are present save the cuta-
neous eruption, such cases may be either of the milder
or more malignant form - Typhoid. Most of
these have already been noticed in the account of
the common symptoms - The non-appearance of the
disease sometimes after the subsidence of the fever
the patient is carried off by the sinking effects
washing ulcers & diseases exhausting diarrhoea
sometimes follows - But the most to be dreaded
of all is tropy - This may be in form of Ascites
hydrothorax, hydropericardium or
hydrocephalus - But the most usual

form is unknown. Having referred to Mr Paper frequently, about these morbid affections — the morbid affection is only allied with albuminous urine and is said to be associated with that state of the kidneys which is found in Bright's disease. Cause to be that of variola, rubeola & glanders is specific and of a zymotic nature. It is usually thought to be contagious, one one strong reason for believing its contagious character. Zymotic nature, is the rapidity with which all the members of a family are occasionally attacked — after the disease has made its first attack on one single member of the family. There is a manifest variety from the two. Bordered other diseases which are thought to be contagious and of a zymotic nature, as small pox & Rubeola — In these the period of incubation is long enough for the septic nature to exert its fermenting influence on all the fluids of the system before the disease becomes manifest. [illegible]

epidemic influence & contagion either being separately & independently sufficiently powerful to produce the disease then there is no difficulty in explaining all the phenomena. When in the latter case, it is only necessary to imagine the epidemic influence to have been in active operation sufficiently long before the appearance of the disease for the propagation of the fermentative action throughout the circulating fluid. If different from the epidemic influence seems to give various tendencies to the disease, terminating sometimes the mildest and at other times the most malignant variety. It gives also a particular direction to the irritation sometimes to the fauces at other times to the alimentary canal &c. &c. The age is exempt from the disease, but children are much more liable to it than attack than adults. It prevails in all seasons of the year. And there are few exceptions to the rule that it attacks the same individual more than once. Dr Williams met with one exception out of two thousand cases, who were so susceptible to the disease as to take it,

whenever brought in its vicinity. The period of incubation varies from two or three days to the number four, five days, or the second time. Diagnosis. Before the appearance of the rash & throat affection there is no means of distinguishing it from any other febrile character. Its general pyrexia of the fever taken with the prevailing epidemic influence and other commemorative signs will be the best guide. After the appearance of the rash the disease will speak for it is most likely to be confounded with Scarlatina. From this it is distinguished by the appearance of the rash on the second instead of the fourth day, by its being of a bright red non-confluent at first & most generally diffused in the latter stage, by its not being in distinct crescentic arrangement, and from being without roughness. The conjunctiva may be red and irritated but the eyes have not the watery appearance of measles. The absence of the throat affection is one important diagnostic sign.

Treatment is at first tonic and [illegible]

The quality is mildest & with scarcely any
symptoms of the most threatening character & the
patient often dies with profound cerebral derangement
On the contrary the most malignant varieties result
in a happy issue - The prognosis is unfavorable with
women in the puerperal state - There is a difference
in opinions as to the influence of age in modifying
its fatality - While some think the probability
of an unfavorable result is increased in
proportion to the advance beyond puberty -
others on the contrary think it is lessened - The
unfavorable symptoms occurring during the progress
of the disease are retrocession of the eruption
recurrence of delirium & coma livid appearance of the
rash petechiae conjunctiva sloughs cold skin &
involuntary discharges - Treatment
What I shall say on this part of my subject
is derived principally from the preceptors
& they are views which I have formed from
public practice & the very extensive
scale that the plan of treatment

might in some epidemic form of the disease be as the definitory case would be when in all the epidemics he has witnessed. The disease is modified that runs through a certain course & which tendency towards recovery. From the different state of the system & the more or less power of resistance found at different times in different organs the symptoms to be met cannot be always told in advance, hence the course of treatment must be more or less expectant. Some of the mildest cases require little or no treatment the only care necessary being to guard against exposure to cold or other injurious influences. Check the appearance of the eruption and at the same time to keep the bowels open by mild cathartics & administer cooling drinks. The disease is more of an irritative than inflammatory & the quick and feeble pulse would seem to indicate more than anything the action of a poison on the system depending on its nature and therefore to contraindicate every

thing like blood letting. Almost all the organs are by
an effort to relieve organs by vomiting & purging this shew
ing that the gastro & intestinal mucous surface were in an
irritated condition. When this first indication
is to relieve this surface. This is done by the
use of remedies which act directly on the
organ as well as by others which act indirectly.
The latter are counterirritants to the cutaneous
surface. It is well known that in all cases
where the gastro & intestinal mucous surfaces
are affected relief is obtained by cutaneous
counter irritations. Now in Scarlatina there
appears to be a natural tendency for a removing the irritation
to take place from the internal organs to the skin & we have
only to assist this to keep. The second prominent
indication is to keep the eruption within
due bounds. There is such a great
tendency to cutaneous irritation that unless
care be taken this organ will be troubled
from performing normal functions and the
effect is often what usually in the disease by

cutaneous transpiration will be restored to the regularity of the whole system — an emetic of tartar is last resorted to relieve the stomach of offending matter & some may so be impressed the system as to prevent the vomiting or purging — any fresh after of the emetic has proved upon some invaluable remedy for relieving the above symptoms. He administered it with or without calomel in doses of 2gr of opium 3gr of calomel given every two hours in several cases, this treatment is seldom required longer than 24 or 48 hours. The stomach & bowels being quieted the eruption comes out. It is then said is zeal in the meantime intended to effect the cure of it from the bowels & stomach & vigorous effort. The eruption appears thick & full & but moderate but being established the eruption the cause should be continued in to fight the inflammation of the skin & the bowels & some opium is administered. and cooling drought the mental anxiety & frequent ablution of the skin with vinegar with sulphur serves to assist the degree of [illegible] [illegible] vinegar is used [illegible]

It allays the prejudice of the vulgar to the danger of catching cold. Acetic acid is [illegible] agreeable. It is with these last remarks that [illegible] of potash or soda is administered [illegible] in some degree to cure and the [illegible] indication. But the effects of this other [illegible] more particular on the blood which [illegible] another indication of attacking and removing the cause which is [illegible] the [illegible] bronchitis, [illegible] the other [illegible] of the [illegible] of [illegible] expectoration. These [illegible] the two prominent indications to be fulfilled. Yet in the course of the disease other symptoms may arise which must be met by another class of remedies. Thus nervous symptoms [illegible] require to be met with [illegible] [illegible] of [illegible] [illegible] [illegible]

in the course and can only be met effectually by a vigorous and active [illegible] treatment — The sulphate of quinia [illegible] & the compound infusion of peruvian bark are well suited to such accidents — When the debility is very considerable [illegible] stimulating [illegible] are required [illegible] the use of ammonia [illegible] & wine in form of mixture — When [illegible] the [illegible] & debility — [illegible] — The [illegible] of tetanic [illegible] symptoms will not [illegible] the use of these [illegible] remedies as the most usually [illegible] often [illegible] or some other [illegible] matter in the blood. When the inflammatory tendency is great [illegible] the [illegible] of the internal organs the [illegible] [illegible] of [illegible] [illegible] but it must be given before the stage of intermission comes on, and arrested as soon as this stage has come on — The [illegible] of the [illegible] must be overloaded — [illegible] prominent & most [illegible]

When it is very slight, a gargle of acidulous water, or infusion of roses, or vinegar may be used. When more severe, gargles of solution of the sulphate of zinc or nitrate of silver from 10 to 20 grs. to the oz. of water may be used as often as necessary. Any excess in dyspepsia, or other disorder should be met by cream of chloride of lime and the severer throat affections treated may be applied externally if not contraindicated by the low state of the system. Warm chloroform, subsequent application or liniment of camphor opinion may be applied. Having passed through the eruptive stage we must then be apprehensive of the sequelæ and complications of this phlegmatic disease. Dropsy — The great common sequelæ is dropsy in form of albuminuria most probably dependent on diseased action of the kidneys. Hence dropsy is a highly complex state of the blood which is due to their sinking power. The blood when drawn is generally found highly coagulating. This state of the system would seem to

require the latter reaction [illegible] through the
superphosphate of lime & [illegible] is of
[illegible] [illegible]
inflammation [illegible] [illegible]
called for in addition to digitalis & colchicum. All
the other agents will be treated as [illegible] of the
Rheumatism by colchicum nitre and [illegible]
iron, iodine &c. Great care should be exercised
through the whole course of treatment that the
patient is not exposed to sudden or [illegible]
temperature or other influences that may
give rise to cold. The prognosis [illegible]
is [illegible] to be of a [illegible] [illegible]
already afforded. Below I also [illegible]
the Hypodermic mode of administering [illegible]
the alkaline extract in one [illegible] of which solution three drachms may be considered
as a dose for each [illegible] [illegible]
adding one drop for each year [illegible]

[illegible]

[illegible]